Ecological Labyrinths and Myths of the Fall.

An Earth-centred approach to *The Lord of the Rings* and *His Dark Materials*

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Abstract

Ecological criticism (ecocriticism) bifurcates between two paths that offer alternative definitions of ecology as a structure. One leads to a fixed, cyclical model, the other moves in a dynamic, evolutionary direction. These differences of orientation frame ecocritical responses that appear irreconcilable to each other. This research provides a way of reading the structure of fantasy texts as parallel to ecological structure in a way that brings the two definitions of ecology into dialogue.

The divergence in approaches to ecocriticism has caused a chasm to open between the respective ends of an ecocritical spectrum in the polemical positions of deep ecology and ecohumanism. These positions reflect fundamental differences over the structure of ecology and tend toward mutual antagonism. This research addresses division in facilitating dialogue through analysis of structural ecological positions as a binary that creates meaning. Such a comparative approach leads to a nuanced understanding of ecological structure and its articulation through narrative design. The reading draws out structural ecological meaning, highlights inconsistencies and weaknesses, and reconciles divergent polemical positions as complementary.

The general principle of reading the quest hero as exemplifying ecological structure has been used by Rachel McCoppin in her analysis of mythological texts to identify ‘botanical heroism’. McCoppin chose to map myths from pre-Darwinian ages to a simple seasonal cycle of nature as her structural model. As such her research does not deal with the complex and nuanced twentieth-century confusion over ecological

structure. My research confronts that problem, proposing a method for understanding discontinuities that are, in any case, ecological in nature.

I arrived at an alternative to the cycle of nature that articulates the struggle to define a pattern of ecological relationships, in the form of the labyrinth. The labyrinth comprises a dichotomy. On the one hand a unicursal model articulates structure as a series of concentric loops that act as boundaries and lead toward a point of illumination. This model incorporates the cycle of nature within a more complex scheme than McCoppin's seasonal model of regeneration. On the other hand the labyrinth in multicursal form comprises a maze that resists regularity, replacing certainty with choice leading either to continued progress or dead-ends. The labyrinth as a symbol of alienation, disorientation and confusion captures the ambition of ecological readings of quests to reconcile humanity and nature.

I apply the eco- labyrinthine model to my reading of two of the twentieth-centuries most popular quest fantasies, J.R.R. Tolkien's *The Lord of the Rings* and Philip Pullman's *His Dark Materials*.

The following study shows that an eco-labyrinthine approach to reading modern fantasy quest provides a way of bringing together alternative perspectives of ecological structure in a dialogue that undermines claims to mutual exclusivity. By way of answers the eco-labyrinth provides a spectrum, or continuum, against which to plot inconsistencies. It opens up questions about heroism mapped against an ecological model. This thesis illustrates how an eco-labyrinthine exegesis works in

relation to certain texts to reassess their ecocritical meaning. Some of the questions this research raises about how authors engage with ecology, biodiversity and evolution through structural modelling of fictitious worlds, reflected in narrative structure, will necessarily benefit from a lively and continuing debate.

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Acknowledgments

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Chapter One:

Introduction: Ecology, Authenticity and the Fall

This study brings together J.R.R. Tolkien's *The Lord of the Rings* (hereafter *Rings*) and Philip Pullman's *His Dark Materials* (henceforth *Materials*) as the primary sources to explore ecological structure because they reflect fundamental divisions in authorial perspective. Bringing these two trilogies in conversation with one another provides a forum to explore how narrative structure and content represents alternative views about ecological structure and authenticity. A comparative analysis illustrates how these texts fit within a labyrinthine structural dichotomy, and how this prism allows us to appraise each text for: its structural ecological consistency; difficulties and divergences in application; and the creation of meaning through a labyrinthine binary approach to ecology. In so doing the study offers a novel way of reading two twentieth-century fantasy texts, which parallels the structure of narrative with the structure of ecology within their fictional worlds.

The choice of *Rings* and *Materials* also draws together two of the most iconic and popular twentieth-century fantasy texts, each of which represent struggles that raise important questions over the action necessary to combat a fundamental crises. In each case the heroic quest raises broader, subsidiary questions about the nature of being. The success of the relative quests resides in the legitimacy of the hero in so far as they act as the champion of authentic order.

In this chapter I locate these texts in relation to definitions of ecological order connected to a mythological tradition framed by the dominant Judeo-Christian,

Western myth of origins located in biblical fall and redemption. I will identify why fantasy provides a suitable means of addressing serious and complex issues in an accessible way, and how structure contributes to generating ecological meaning. General structuralist principles will be referred to where they comprise useful tools and perspectives to apply to my reading of these texts. In this chapter I will look at the structure of quest fantasy and its metaphorical extension to stand for general rites of passage toward transforming consciousness. The chapter closes by considering Rachel McCoppin's recent application of similar principles in her structural ecocritical reading of mythology based on parallels between the quest hero and the cycle of nature. I assess the strengths and weaknesses of McCoppin's approach preparatory to proposing an alternative model that I term an eco-labyrinthine approach. I briefly set out his approach and its advantages as a twentieth-century model over the cycle of nature to conclude the chapter. The following chapter will look at eco-labyrinthicity in more detail alongside how it compares to, and differs from, existing ecocritical and mythological approaches to reading these particular fantasy texts.

I begin by considering the paradoxes within Darwinian ecology. The German scientist Ernst Haeckel coined the term ecology in 1866 to describe 'the body of knowledge concerning the economy of nature…the study of …interrelations referred to by Darwin as the conditions of the struggle for existence.'[1] The interrelations Haeckel refers to encompass both biotic and abiotic factors that together provide the conditions for the maintenance of life. Therefore ecology, broadly speaking, concerns the overall pattern of relationships and structures that sustain life.

[1] R.C. Stauffer, Haeckel, Darwin and Ecology, *Quarterly Review of Biology*, 32, (1957),pp.138-144 (p.141).

Gregory J. Cooper writes of Darwin's famous fondness for 'the idea of an "economy of nature" – the notion that through the workings of a hidden hand, the struggles of the various individuals produce an overall balance or order in the entangled bank.'[2] Darwin's conception of the 'entangled bank'[3] allowed for the continued idea of a providential force behind the establishment of ecological order. Equilibrium theories continue to attract popular and scientific support. The equilibrium model infers that a harmony exists within nature and conversely that disruption of balance is unnatural. The balance model also makes a link between plenitude and ecological health. For example biologist and ecological theorist René Dubos characterises local ecosystems as a microcosm, 'more likely to be durable when they contain a great diversity of species and when these are linked in complex symbiotic relationships.'[4]

While equilibrium theory has never gone away it paradoxically co-exists alongside the Darwinian theory of evolution that undermines the hypothesis. Evolution comprises a constant process of incremental change. It follows that equilibrium can only be maintained through equitable rates of evolution. Where marked imbalances in the rate of evolutionary improvement develop, species unable to modify, adapt and deal with change decline or become extinct.[5] These somewhat contradictory ideas about the nature of ecology, as either a balanced structure or as a dynamic system in constant flux persist. They inform alternative perspectives about authentic human relationships with nature.

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[2] Gregory J. Cooper, *The Science of the Struggle for Existence: On the Foundations of Ecology* (Cambridge: Cambridge University Press, 2003), p.13.
[3] Charles Darwin, *On the Origin of Species* (Great Britain: Amazon, 2021), p.313.
[4] René Dubos, *The Wooing of Earth: New Perspectives on Man's Use of Nature* (London: The Athlone Press, 1980), p.155.
[5] Cooper, p.13.

A recent study of authenticity by Maiken Umbach and Matthew Humphrey finds the concept employed to confer legitimacy in 'any discourse that suggests that there is a genuine, uncorrupted, real unspoilt form of human life, or form of existence.'[6] As such, authenticity discourse tends to be idealistic, autocratic and incontestable. The twentieth century brought the question of ecological authenticity sharply into focus in the West. New scientific explanations of ecology encouraged secularism and rationality, conflicting with pre-scientific spiritual and aesthetic relationships with nature. At the same time a growing unease about the rate and effect of human activity on local environments and on ecology per se began to raise questions over the direction in which humanity was heading. These concerns would lead to Paul Crutzen's recognition that human activity since 1800, through industrial revolution and scientific advances comprised the epoch in which humanity's impact on the earth had begun to surpass that of non-human nature, for which he coined the term the Anthropocene Age, or Age of Man.[7] As human impact became associated with ecological disorder, pollution, climate change etc so humanity's actions appeared increasingly at odds with nature, and inauthentic.

One reaction to concern over human domination of nature and its consequences was the emergence of ecocriticism as a discipline in the 1990's. Ecocriticism was initially popularised in Cheryll Glotfelty and Harold Fromm's seminal anthology *The Ecocriticism Reader: Landmarks in Literary Ecology* (1996). Glotfelty's inclusive

[6] Maiken Umbach and Matthew Humphrey, *Authenticity: The Cultural History of a Political Concept* (Cham: Palgrave MacMillan, 2018), p.6.
[7] Steffen, Will, Paul J. Crutzen and John R. McNeill 'The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?', *Ambio: A Journal of the Human Environment*, 36 (2007), 614-621; Paul J.Crutzen, 'Geology of Mankind', *Nature* 415: 6867 (February 2002), p.23.

definition of ecocriticism that 'all ecological criticism shares the fundamental premise that human culture is connected to the physical world, affecting it and affected by it'[8] encourages alternative answers to the fundamental question of authenticity. Glotfelty did however usefully make a distinction between environmental and ecological approaches. She found the eco-prefix preferable as it identifies humanity as part of a relational system, of ecology, rather than foregrounding humanity against nature as a background environment.

A year after The Ecocritical Reader, Ursula K. Heise drew attention to the temporal, cultural and imaginative aspect of defining nature:

> Ecocriticism analyses *the role that the natural environment plays in the imagination of a cultural community at a specific historical moment, examining how the concept of "nature" is defined, what values are assigned to it or denied it and why, and the way in which the relationship between humans and nature is envisioned*. More specifically, it investigates how nature is used literally or metaphorically in certain literary or aesthetic genres and tropes, and what *assumptions* about nature underlie genres that may not address this topic directly (emphasis added) [9]

Differing fundamental assumptions account for the polarisation of ecological criticism. Lawrence Buell notes that lack of uniformity has encouraged successive

[8] Cheryll Glotfelty, Introduction, in *The Ecocriticism Reader: Landmarks in Literary Ecology*, ed by Cheryll Glotfelty and Harold Fromm (Athens Georgia: University of Georgia Press,1996), p.xix.
[9] Ursula K. Heise, Science and Ecocriticism, *The American Book Review*, 18.5 (July-August 1997), pp 4-7, p.4.

waves of rival perspectives in ecocriticism, each of which lays claim to hegemony. Buell refers these waves back to the fundamental dichotomy between definitions of authenticity. He writes of a first wave of ecocriticism predisposed towards 'natural' environments defined by their independence from human influence, and a second wave which intertwines humanity and nature, and naturalises human participation in the authentic, evolution of ecology.[10]

The fundamental divide over authenticity is at its most pronounced in ecocriticism between the approaches advocated by deep ecology and ecohumanism. Deep ecology adopts an uncompromising adherence to a philosophical ecological egalitarianism, based on the principles of equilibrium. Coined by Arne Naess in reaction to shallow, resource-based ecological activism focused on prioritising human well-being, deep ecology regards non-human life as possessing intrinsic value and independence from humanity.

Deep ecology's belief in ecological harmony and the negative influence of humanity, has led to deep ecology being criticised as misanthropic. Naess identified with external threats to local areas that have 'obtained an ecological equilibrium'[11] and he valued local autonomy. However, Naess also distanced deep ecology from the science of ecology, locating it instead as an eco-philosophy (ecosophy) tied to value systems. Naess saw the value of ecosophy in its identification and articulation of general principles only partially validated through

[10] Lawrence Buell, *The Future of Environmental Criticism: Environmental Crisis and Literary Imagination* (Oxford: Blackwell Publishing, 2005), pp.21-22.
[11] Arne Naess,The Shallow and the Deep, Long-Range Ecology Movement. A Summary, *Inquiry*, 16, pp. 95-100, p.98.

scientific proof.[12] Deep ecology principles do not therefore rely upon scientific measurement, but on a system of valuing that goes beyond this; one that includes imagination, intuition, and a spiritual or aesthetic, form of estimation. Naess suggests 'Perhaps the most influential participants are artists and writers who…(express) themselves …in art or poetry.'[13] He also writes of how 'ecosophy might profitably use models of systems, rough approximations of global systematizations. It is the global character, not preciseness in detail, which distinguishes an ecosophy.'[14]

Naess regarded nature as a moderating influence on religion as 'numerous Christians in Europe and America…have actively taken part in the deep ecology movement…and their theological positions have been reformed from what was, until recently, a crude dominating anthropocentric emphasis.'[15] Colin Duriez suggests that the strong influence of Roman Catholic Christianity on Tolkien's thought was contiguous with his comprehension of a divine guiding pattern made visible in nature. Duriez identifies Tolkien's ecosophy as a variation on natural theology. Whereas natural theology ordinarily posits the possibility of knowing God solely through the lens of creation (nature) by applying reason, Duriez sees Tolkien substituting reason with imagination as the means of engaging with nature and God.[16]

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[12] Naess, *Inquiry*, p.99.
[13] Arne Naess, *'The Deep Ecological Movement: Some Philosophical Aspects'* (1986), pp. 402-415, p.407. <http://www.uv.mx/personal/jmercon/files/2011/08/Naess_DeepEcology.pdf> [accessed 24 November 2017].
[14] Naess, *Inquiry*, p.100.
[15] Naess, *'Philosophical Aspects'* , p.412.
[16] Colin Duriez, 'The Theology of Fantasy in Lewis and Tolkien', *Themelios*, 23.2 (1998), 35-51 (p.45).

Deep ecology chimes with Tolkien's depiction of nature and society in *Rings*. His validation of hobbit society as agrarian and self-sufficient speaks of ecological equilibrium. The equality of creatures in Middle-earth extends across its many races and notably includes its trees. Tolkien found a particular joy in arborial life. Tolkien's published correspondence attests to his preoccupation with the conflict between nature and culture. He writes that 'I am (obviously) much in love with plants and above all trees, and always have been; and I find human maltreatment of them as hard to bear as some find ill-treatment of animals.'[17]

Tolkien also shares with deep ecology a distrust of technology, bemoaning the 'roar and riot' caused by traffic and commenting, 'how I wish the 'infernal combustion' engine had never been invented.'[18] This antipathy toward technology as a vehicle for changing the balance of power appears markedly in *Rings* via the transformation of the Shire from a self-sufficient, agrarian economy to an economy based on over-production, export abroad and environmental ruination and shortages at home.

The inability of humanity to wield knowledge responsibly also moves Tolkien to refer to the Second World War as 'the first War of the Machines' and to refer to people as 'the servants of the Machines.'[19] While Tolkien rejected claims that *Rings* was inspired by successive world wars, the context in which he was writing and the nature of threats to its ecology might be expected to colour his work. Indeed recent

[17] J.R.R. Tolkien, *The Letters of J.R.R. Tolkien.* ed by Humphrey Carpenter (London: Harper Collins, 2006), p. 220.
[18] Tolkien, *Letters*, p.77.
[19] Tolkien, *Letters*, p.111.

Tolkien criticism has likened *Rings* representation of civilizations in decline to Spenglerian organicist memes found in *The Decline of the West* (1932). Michael Potts likens *Rings* to the articulation of a pessimistic view of the downfall of civilizations that mirrors the seasonal cycle.[20] Spengler's cyclical history depicts a determinist trajectory in which civilizations outgrow their strength, wither and die, to be replaced with new civilizations.

In stark contrast to Tolkien, Philip Pullman's ecological pronouncements suggest an affinity with ecohumanism, the antithesis of deep ecology. Pullman's views on human progress as the realisation of an evolving natural order also echoes a morphological historical theory, as found in Lewis Mumford's *Technics and Civilization* (1934). Mumford, regarded as one of the founding fathers of what would become known as ecohumanism,[21] refuted Spengler's pessimism through a theoretical account of the organic development of civilization. Mumford separated history into three stages of technological evolution as the 'eotechnic' which related to 'the Medieval period (which in varying degrees persisted right up to the middle of the eighteenth century)…the period of the Industrial Revolution …(which he termed the) paleotechnic…(and) The emerging modern phase…(the) neotechnic'.[22] Mumford's antipathy toward the paleotechnic's 'immaterial elements such as routinization and order'[23] was matched by his faith in the continuum of a teleological

[20] Michael Potts, "Evening Lands": Spenglerian Tropes in Lord of the Rings, *Tolkien Studies*, 13, 2016, pp.149-168, p.169.
[21] Brian Morris, *Pioneers of Ecological Humanism* (Brighton: Book Guild Publishing, 2012)
[22] J.A.C. Brown, *The Social Psychology of Industry* (Harmondsworth: Penguin Books, 1972), p.22.
[23] Chris Renwick and Richard C. Gunn, 'Demythologizing the Machine: Patrick Geddes, Lewis Mumford, and Classical Sociological Theory', *Journal of the History of the Behavioural Sciences*, 44 (2008), 59-76 (p. 70).

evolution that would heal industrialism's ills. Brian Morris identifies Mumford as one of the central figures in establishing eco-humanism's perspective on technology as joining humanity and the environment 'not merely because it enabled him to reshape it, but because it made him recognise the limits of his capacities.'[24] Morris describes how Mumford saw the future age as a eutopia, which reflects life as a 'dynamic (not static) equilibrium of organisms within an ecosystem.'[25] That Mumford and Spengler published their work two years apart reflects the fundamental disagreements in Western discourse during the early part of the twentieth century over the direction of human society guided by organic principles.

These insights are useful in their focus on morphological interpretations of ecology at the level of civilizations. They articulate a teleology of self-realization or fate, however in so doing they may diminish the agency of the hero to affect the future. Pullman recognises this in the Mumfordian vision of his own commitment to the environment; 'In principle, I'd have everything: I'd plaster the house with photovoltaic cells and have wind turbines off every gable.'[26] He criticises both climate-change deniers and also those who profess a supine and ignorant belief that technology will always provide a remedy. It is not enough therefore to merely believe in the morphological teleology of a neotechnic future, you also have to work towards it. As Pullman reflects in *Materials*, merely revealing the death of God in stark terms does not necessarily alter behaviour. The book ends with a return to separate societies in which error still remains, there is no final victory, and mortal

[24] Morris,*Pioneers*, p.32.
[25] Morris, *Pioneers*, p.85.
[26] Andrew Simms, 'Philip Pullman: New Brand of Environmentalism', *The Telegraph*, (2008) <http://www.telegraph.co.uk/earth/3322329/Philip-Pullman-new-brand-of-environmentalism.html> [Accessed 6.9.11.]

cycles determine that the battle must be fought repeatedly in successive generations.

Pullman has described story as a vehicle to express ecological consciousness; 'Environmentalists need to know something about basic storytelling in order to make their words effective…I suppose the real story, the basic story, the story I would like to hear, see, read, is the story about how connected we are, not only with one another but also with the place we live in. And how it's almost infinitely rich, but it's in some danger; and that despite the danger, we can do something to overcome it'.[27]

Some 40 years separate the publication of J.R.R. Tolkien's *Rings* trilogy (1954-1955) and Philip Pullman's *Materials* (which appeared in three parts between 1995 and 2000). Across this period the rate and scale of advances in human technological progress and consequent impact on the planet had accelerated markedly. Yet, as English authors, they inherit a shared cultural, historical and cosmological legacy through which they derive their contrasting views of modernity and religion that consequently determine how they define authenticity.

The search for authenticity tends to look for an unadulterated state preceding the present. Laurence Coupe identifies creation myth as fundamental in articulating an 'explicitly religious affirmation about the relationship between the gods who create and the earth that is created.'[28] William Bascom offers a useful contextual definition

[27] Simms.
[28] Laurence Coupe, 'Genesis and the Nature of Myth', *Green Letters: Studies in Ecocriticism*, 11 (2009), 9-22 (p.9).

of myth as 'prose narratives which, in the society in which they are told, are considered to be truthful accounts of what happened in the remote past.'[29] Bascom goes on to note that the alternative mythic world establishes and articulates transferable laws enacted in theology and ritual.

The Christian creation myth of the Fall has shaped the development of Western thought about authenticity. In Christian cosmology, the Fall takes place at the dawn of time in a harmonious, balanced eco-system in the idyllic Garden of Eden. The biblical myth suggests that in its authentic state creation was originally 'good' but it was corrupted by a fallible humanity's breach of boundaries in acquiring forbidden knowledge that brings about disequilibrium and consequent disharmony. As a result the whole system or structure of Eden gives way with the advent of death, the concomitant descent of animals into preying on each other, leading to expulsion to a fallen world.

We find the Christian Fall thematically reflected in the fallen nature of the worlds in *Materials* and *Rings*. The former explicitly locates itself as congruent with the Fall, Pullman's trilogy takes its name from a line from John Milton's epic rendering of the Fall in *Paradise Lost*[30] and the subject matter readdresses the Fall by inverting the myth. Pullman represents the fallen state as one of ignorance of the knowledge to assure the continuance of an authentic, sustainable ecology. Consequently, rather than the advent of human mortality the inverted fall brings about the death of the figure of god.

[29] William Bascom, 'The Forms of Folklore: Prose Narratives, *The Journal of American Folklore*, Vol.78, No.307 (Jan-Mar, 1965) pp.3-20, p.4.
[30] Philip Pullman, *Daemon Voices: Essays on Storytelling*, ed by Simon Mason (Oxford: David Fickling Books, 2017), p.64.

The Fall appears implicitly in *Rings* where the quest hero accepts the responsibility to redeem a fallen world by symbolically destroying the embodiment of illicit power. The quest resolves an issue that relates to the cosmological origins of a fallen Middle-earth. Rather than challenge scripture Tolkien's fallen world shares the same causes and symptoms transferred to parallels in his own invented mythology. This is consistent with his evident fascination with the biblical Fall that appears in the index of Tolkien's published personal correspondence no fewer than eighteen times. Tolkien was given to reacting to contemporary issues as a consequence of his literal belief in the Fall.[31] It also reflects Tolkien's understanding of all mythology as valuable as a vehicle for conveying truth, in so far that it contains 'fragments of light' as glimmers of Christian truth.

Christianity and particularly the Fall myth occupies a particularly relevant position in ecocritical debate about the advent of the Anthropocene Age. Genesis confers divine sanction to human claims to holding dominion over nature. God variously confers upon humanity the right to name the animals and to subdue nature. The brief biblical account in Genesis of the original, or authentically pure, prelapsarian relationship that separates humanity from the remainder of creation paradoxically sits next to the Fall as punishment for human acquisition of illicit knowledge that facilitates just such a hegemony.

The negative perception of Christianity's influence on ecological degradation in the Anthropocene owes much to Lynn White Junior's seminal article published in 1967

[31] Tolkien, *Letters*, p. 110.

in the journal *Science*, entitled 'The Historical Roots of our Ecologic Crisis.'[32] Here White, himself a Christian, explicitly acknowledges Christian theological culpability for the growing sense of ecological decay in the Anthropocene. The article remains the touchstone for examining Christian eco-philosophy into the twenty-first century where it remains 'the most cited piece in the whole ecotheological debate.'[33]

White criticises Western Christianity's literal belief in Genesis. He argues that this religious perspective of authenticity informs the anthropocentric development of technology in Western Europe that from the eleventh century onwards marked an increasingly exploitative and exorbitant relationship with non-human nature. White argues that the anthropocentric Christian philosophy of origins provided a legacy that informed scientific explanations of ecological relationships that elevate humanity. As a result White concludes:

> What we do about ecology depends on our ideas of the man-nature relationship. More science and more technology are not going to get us out of the present ecologic crisis until we find a new religion, or rethink our old one[34]

White disregards the option of rejecting the spiritual in favour of a purely scientific understanding of ecology, perhaps because of his own religious faith or possibly because evolutionary theory also serves to confirm humanity's ascent as the

[32] Lynn White, Jr., 'The Historical Roots of our Ecologic Crisis', *Science*, 155.3767 (10 March 1967), 1203-1207.
[33] David G.Horrell, *The Bible and the Environment: Towards a Critical Ecological Biblical Theology* (London:Equinox, 2010), p.6.
[34] White, Jr., p.1204.

dominant species. The evolutionary advantages humanity exploits replace a sense of God-given right to rule with a self-justification by merit in a competitive, dynamic system.

White's suggestion of finding a 'new' religion might refer to a different existing religion or a newly coined nature religion. Both suggestions have proved attractive to ecocritics but each have the same fundamental weakness of applicability and ownership as a replacement myth. Yi-Fu Tuan is among a number of critics who point to how Amerindian and Eastern Religion fails to match ecological rhetoric in historical practise, while Tuan suggests that pagan and Christian Europe presents a continuum in ecological thought rather than pivotal change.[35] Advocates for a completely 'new' religion such as Bron Taylor, who suggests developing a neo-pagan 'dark green religion',[36] face the obstacle of establishing literal belief in a substitute religious mythology formed in the twentieth century where literal belief in creation mythology has largely given way to scientific accounts of evolutionary origins and structure. White proposes rethinking Christianity and offers as an alternative Christian exemplar the minor, if popular, religious figure of St Francis of Assisi. There is however an obvious difficulty of locating a Christian reading around a follower of Christ rather than in the redemptive figure of Christ himself. For all his merits Francis remains within the orbit of a larger doctrine of human fallibility and does not reframe the original myth of origins.

[35] Yi-Fu Tuan, 'Views: Our Treatment of the Environment in Ideal and Actuality: A Geographer Observes Man's Effect on Nature in China and in the Pagan and Christian West'', *American Scientist*, 58.3 (1970), 244-249 (pp. 247-249).
[36] Bron Taylor, *Dark Green Religion: Nature Spirituality and the Planetary Future* (Berkeley: University of California Press, 2010), pp. 14-15.

The revision of Fall mythology has a long history, partly in response to the scriptural inadequacy of the account in Genesis, and contradictory passages about ecological principles found elsewhere in the Bible. Stephen Greenblatt's *The Rise and Fall of Adam and Eve: The Story that Created Us* (2017) identifies the myth's expansion beyond scripture through imaginative additions and rival interpretations that supplement and expound upon the 'at once tantalizing and parsimonious,… blend of ethical conundrums and baffling silences'[37] found in the brief account in Genesis.

I will focus on the ecological currency of revisions in so far as they concern re-attaining an authentic relationship with nature in a fallen world qualitatively different to Eden. Greenblatt identifies three influential interpretations congruent with locating such ecological currency, respectively; uncorrupted authenticity i.e. innocence; interpretations of authenticity that confront power; heroism and its relationship to freewill. Each of these themes can be found foregrounded in *Rings* and *Materials*.

Greenblatt finds that the rediscovery of innocence preoccupied interpreters of the Fall. Genesis raises many ambiguous and contradictory ideas; among them the valorisation of innocence which conversely contributes to the Fall. The full consequences of the Edenic couple's actions extend far beyond their ability to comprehend in a world originally without death. Nevertheless, the idealization of innocence in Genesis led to its identification with childhood and the associated sense of loss during the passage into adulthood. This theme appears in both *Rings* and *Materials*. In the former the Rangers under their leader Aragorn act as

[37] Stephen Greenblatt, *The Rise and Fall of Adam and Eve; The Story that Created Us* (London: Vintage, 2017), p.67.

unceasing guards on the borders of the Shire; their aim being to protect the lives of the hobbits within in a state of blissful ignorance. The threat to the Shire, as in Eden, comes from without. Frodo, as the principle vehicle of the quest in *Rings*, embarks on his mission at the point at which he passes from childhood into maturity. Furthermore, the hobbits in general appear to have some manner of protection from the effects of the malevolence of the ring due to their childlike simplicity. *Materials* similarly invests its quest in the hands of figures on the verge of adulthood in the lead characters of Lyra and Will. Puberty in *Materials* links to the accretion of knowledge articulated through the gathering of 'dust' or dark matter as a physical representation of the passage from childhood to adulthood based on developing mental faculties. Retaining childhood innocence features as the preoccupation of the Church, which seeks to separate children from their authentic condition and separate them from nature by precluding the passage to maturity.

While from the outset some Christian believers eschewed a literal reading of Genesis and regarded the account as an allegorical rendering of the truth, others adopted it for their own purposes to justify selfish exploitation of nature as God-given resource or to justify counter-cultural activity aimed at returning society to an authentic scheme usurped by inauthentic and fallen human society. English history discloses a number of examples using Eden as the structural model for society that they wished to see re-imposed. These counter-cultural ideas reached their zenith in the English Revolution with the formation of the Diggers, who saw the original Fall repeatedly echoed in fallen contemporary society. Their leader, Gerrard Winstanley claimed that Adamic innocence and purity remained invested in childhood, and

spoke of the desire to recover innocence in adulthood by learning to reject materialism and sharing the earth as God intended.[38]

The Fall as the location of heroism appears most famously in John Milton's poem *Paradise Lost*, spread across ten books and over ten thousand lines of verse with its 'attempt to confer on the biblical narrative the martial power of the epic.'[39] Milton's imaginative embroidery engaged with contemporary crises found in the counsels of the English Revolution.[40] He drew an expanded picture of the ecological harmonious Eden, where nature creates a natural bower for the humans employed in maintaining equilibrium. Danger intrudes with the Satanic possession of the snake that tricks Eve, however Milton's depiction of the figure of Satan as a persuasive force and the association of virtue with freewill confused the very nature of the Fall. *Paradise Lost* inadvertently popularised a history of inversion that includes William Blake's perception of Milton's Satan as a romantic rebel:

> The reason Milton wrote in fetters when he wrote of Angels & God, and at liberty when of Devils & Hell, is because he was a true Poet and of the Devil's party without knowing it.[41]

Pullman identifies Blake's subversive reading of Milton as inspiration for *Materials* with the heroic desire to break free from a restrictive system. In conclusion Greenblatt notes that mythic embellishments are now part of popular understanding

[38] Christopher Hill, *A Nation of Change and Novelty: Radical Politics, Religion and Literature in seventeenth-century England* 2nd ed. (London:Bookmarks, 1993), p.148
[39] Greenblatt, pp.208-209.
[40] Greenblatt, p.209.
[41] William Blake, *The Marriage of Heaven and Hell* (Oxford: Oxford University Press, 1975), p.6.

of the Fall.[42] He observes that at the start of the twenty first century the story shifts from literal belief toward 'a fanciful attempt to account for the way things are'[43] and yet 'Even those who think that the story is untrue may hold on to it for some time…because the alternative is not clear, or because it still seems to convey something important about life.'[44]

The Fall, shared broadly by the Abrahamic faiths, identifies authenticity through an equilibrium model. However its first principles are qualitatively transformed through the Christian story of redemption through the heroic quest of the individual figure of Christ. The Christian response to the Fall takes the form of a sacrificial journey of redemption which retains the adulterated network of earthly relationships rather than re-establishing Eden. The relationship of the Fall to freewill and choice takes on a different hue. Seen as a prerequisite for Christ's quest the initial act has been interpreted in some quarters as fortunate (felix culpa). Christ provides a model of redemption by example through a journey that includes temptation, freewill, confusion, but which ultimately embraces earthly mortality. In Richard Harrison's view, 'The New Testament changes the Bible. Godly power is replaced by Christly powerlessness.'[45]

Mircea Eliade writes of the link between a culture's cosmogonic myth of origins and its rites of healing. These rites revisit myths of creation and their accounts of the

[42] Greenblatt, pp.74-75.
[43] Greenblatt, p.251.
[44] Greenblatt, p.251.
[45] Richard Harrison, The Graphic Novel as New Testament, in *The Influence of Imagination: Essays on Science Fiction and Fantasy as Agents of Social Change*, ed by Lee Easton and Randy Schroeder (Jefferson:McFarland & Co Inc, 2008) pp.99-107, p.103.

source of disorder in the world and in some sense place the subject back in the myth, 'the therapeutic purpose of which is to begin life once again, a symbolic rebirth…life cannot be repaired, it can only be recreated through symbolic repetition of cosmogony… the paradigmatic model for all creation.'[46] Tolkien makes a similar point in his letters when writing about his own cosmology of Middle-earth.

> In the cosmogony there is a fall…though quite different in form, of course, to that of Christian myth…but they must inevitably contain a large measure of ancient wide-spread motives or elements. After all, I believe that legends and myths are largely made of 'truth' and indeed present aspects of it that can only be received in this mode; and long ago certain truths and modes of this kind were discovered and must always reappear. There cannot be any story without a fall – all stories are ultimately about the fall.[47]

Tolkien's cosmogony appears in *The Silmarillion* which outlines an initial fall, repeated in successive ages and redeemed in *Rings*. As in Fall mythology, Tolkien's cosmogony involves the breaching of a divine prohibition, brought about by a deceiver who denies the authority of divine power. As a result the people of Numenor reject prohibition in order to acquire the stature of gods. A rupture results with the old world split, removing what Tolkien terms 'Valinor (or Paradise)[48] from the circuits of the earth at the end of the Second Age of Middle-earth. *Rings* tells the story of a Third Age, the age of healing, tied to the redemption of the Numenorian

[46] Mircea Eliade, *The Sacred and The Profane: The Nature of Religion*, trans. by William R. Trask (New York: Houghton Mifflin Harcourt, 1987), p.82.
[47] Tolkien, *Letters*, p.147.
[48] Tolkien, *Letters*, p.156.

people who will ultimately inherit Middle-earth. Similarly in *Materials*, multiple worlds are already fallen into disrepair and the trilogy focuses on healing through a return to authenticity.

Both *Rings* and *Materials* focus on healing in relation to a falling away from authentic relationships with nature. In correspondence Tolkien writes of Eden that 'We shall never recover it, for that is not the way of repentance, which works spirally and not in a closed circle; we may recover something like it but on a higher plane.'[49] In *Materials* Pullman's quest arrives at an evolutionary Eden in which humankind does not exist, albeit human agency must act to ensure its survival. However, consistent with the idea of evolution this change marks another stage in its development, and ultimately the pseudo-Edenic realm returns beyond the margins of human accessibility. The Fall viewed thus provides both an ideal representation of ecology, and its unattainability. It establishes a tension between the ideal and reality, which reflects desire.

Desire has repercussions in particular for reading *Rings*, perhaps best expressed by H. Paul Santmire, who writes of Christian theological perspectives on nature as a dyad. Santmire identifies a *spiritual motif* and an *ecological motif* within Christian theology. These motifs are not mutually exclusive and their joint influence can at times lead to tension. The former according to Santmire, preoccupies itself with spiritual affinity with God based on hierarchical principles. If the *spiritual* validates nature in the process it does so incidentally, by association. By contrast the ecological motif focuses on the 'biophysical order, as the context in which the life of

[49] Tolkien, *Letters*, p.110.

obedience to God is to be pursued.'[50] I will later apply these motifs to explain the tension in *Rings* between spiritual and structural ecology as expressed through the function of Tolkien's elves who I examine as spiritual rather than ecological exemplars.

By the twentieth century the imaginative representation of reality had passed from literal mythology into the adjacent field of the fantasy novel. Fantasy writing inherits from myth the freedom to present stories that take place in worlds where rules and limits are expanded, examined and explored. Just as myth's currency had been devalued by science, fantasy's further removal from literal reality served to identify it in popular understanding as lacking the gravitas of myth. When Philip Pullman asserts that, ''I'm not a fantasy fan. I'm uneasy to think I write fantasy'[51] he betrays an anxiety about perceptions of fantasy as light-hearted, escapism.

Pullman echoed Tolkien's earlier concern about the belittling of fantasy. Critical literary approaches to the Fantasy genre recognise its inheritance of narrative traditions that include; myth, fairy story, epic, mysticism, balladry, heroic quest and legend. Fantasy writers rely on this inheritance to a greater or lesser extent. Tolkien viewed mythology as providing 'a splintered fragment of true light, the eternal truth that is with God.'[52] He regarded even misguided myths as retaining an essential quality within them that ensures that 'they steer however shakily towards the true

[50] H. Paul Santmire, *The Travail of Nature: The Ambiguous Ecological Promise of Christian Theology* (Philadephia: Fortress Press, 1985), p.9.
[51] Harriet Lane, 'Pullman's Progress', *The Observer*, (2004) <http://www.guardian.co.uk/books/2004/oct/10/booksforchildrenandteenagers.philippullman> [Accessed 5 September, 2011].
[52] Humphrey Carpenter, *J.R.R. Tolkien: A Biography* (London: Harper Collins, 2002), p. 198.

harbour,' whereas materialistic “progress” leads only to a yawning abyss and the Iron Crown of the power of evil.’[53] Tolkien’s ideas on the currency of mythology were most cogently set out in his role in the conversion of his friend C.S. Lewis. Tolkien challenged Lewis’s premise that the Christian story, while compelling, was only a fictitious myth. Tolkien responded by defending mythology per se and suggesting that Christ’s story itself was a myth, but distinguished from other myths by being true. Myth translated into reality and lived by God. In his treatise *On Fairy Stories*, Tolkien articulates his understanding of the ‘faerie form’ as ascending toward myth and therefore also consonant with articulating religious truth.

Brian Attebery has framed discussion of fantasy within the rubric of its relationship to myth; ‘I do not want to claim that one can find myth in fantasy, though that is certainly the case. Rather, I am looking at the way writers use fantasy to reframe myth: to construct new ways of looking at traditional stories and beliefs.’[54] In part, reframing relates to the manipulation of elements present in myth serving to facilitate engagement with contemporary issues. In *Fantasy: The Liberation of Imagination*, Richard Mathews suggests that ‘modern fantasy is characterized by a narrative frame that unites timeless mythic patterns with contemporary individual experiences. Its stories at their hearts are about the relationship between the individual and the infinite.’[55]

[53] Carpenter, p.198.
[54] Brian Attebery, *Stories about Stories: Fantasy and the Remaking of Myth* (Oxford: Oxford University Press, 2014), pp.2-3.
[55] Richard Mathews, *Fantasy: The Liberation of the Imagination* (London: Routledge, 2002), p.1.

Reframing can take inspiration from the past or legitimise new perspectives that build on a recognisable historic legacy from which the story evolves. Dimitra Fimi has noted this to be the case with contemporary fantasy re-workings of Celtic myth, where identity is integral to invoking a sense of ownership and relevance in what she terms a 'chain of transmission.'[56] Allusions to real locations in secondary worlds strengthen the connection between an enchanted secondary fantasy environment and perceptions of how we see the primary world. Through this connection fantasy maintains a link with mythology where story acquires a transitive relevance.

In reading *Rings* and *Materials* the chain of transmission locates their fantasy worlds as parallels with recognisably English environments. As twentieth-century texts they reflect the debates about authenticity within the inescapable context of the Anthropocene. These parallels invite the reader to relate the fantasy quest to the real world, thus encouraging their comprehension as myth.

Fantasy influenced by myth and fairy tale must necessarily assimilate certain of their structural features. Claude Levi Strauss highlights the systematic relationships within individual myths and how these should be looked at in concert with other related myths. Strauss identifies binary oppositions applied repeatedly in myths that work together to create meaning. The currency of these oppositions does not lie in their exclusivity as markers of positive and negative values, but in how they identify inconsistencies that shed light on the ambiguity and complexity of meaning. I apply these ideas about binary opposition to alternative conceptions of ecology as cyclical (*Rings*) versus evolutionary (*Materials*).

[56] Dimitra Fimi, *Celtic Myth in Contemporary Children's Fantasy: Idealization, Identity, Ideology* (London: Palgrave Macmillan, 2017), p.266.

The connection between imagery and structure, to articulate authenticity, that I employ is partially grounded in Carl Gustav Jung's psychological theories of the generation of meaning in mythology. Jung suggests that in mythology we unconsciously communicate through archetypes, as symbols that re-establish connections with our roots. Jung claims that such archetypes are universally inherited and therefore unadulterated markers of authenticity.[57]

Structure also emerges through the relationships between types of character. Vladimir Propp's work with folk tales identifies how a variety of actants perform set roles in order to frame stories. Propp's typology includes eight broad character types where the hero emerges through their difference to the villain, false hero and the figure of the helper. Other characters exist to furnish the hero with assistance or serve as the prize or reward for the heroic quest. We find these roles as part of the structural architecture of *Rings* and *Materials*. Actant roles readily aid understanding through their familiarity and by association their binary oppositions expand our consciousness of good and evil in the text. I will reinterpret character types through their relationship with the ecological structure of the text.

Rings and *Materials* comprise a particular kind of fantasy, the quest fantasy, an epic genre that differs from the adventure through its focus on a goal that emerges as the story progresses and which holds a profound significance.[58] W.H. Auden identified

[57] Carl Gustav Jung, *The Earth has a Soul: C.G. Jung on Nature, Technology and Modern Life*, ed. By Meredith Sabini (Berkeley: North Atlantic Books, 2008), pp.198-199.
[58] John H. Timmerman, *Other Worlds: The Fantasy Genre* (Bowling Green: Bowling Green University Popular Press, 1983), p.91.

six essential elements of quest; the search for a precious object; the long journey with an uncertain destination; the hero as chosen and destined to undertake the quest; tests that confirm the singularity of the hero and exclude other candidates; enemies who seek to thwart the quest who must be overcome; helpers who possess knowledge and magical power essential to the hero's success.[59] Other critics have supplemented these criteria. John H. Timmerman suggests as essential a contextual crisis that necessitates embarking on the quest.[60] Such necessity indicates that the quest involves subjugation for the greater good, rather than a search for personal glory.

Joseph Campbell suggests that the quest hero experiences cosmogonic origins which frame his/her own acts of transformative heroism.[61] Campbell coined the term monomyth to suggest that myth largely derives from one essential pattern. For Campbell heroism emerges through the structure of the rite of passage; 'a magnification of the formula... separation-initiation–return'[62] through which the hero's achievement serves as a revival of energy and brings about renewal of authentic order.[63] Campbell identifies the quest crossing a 'magical threshold'[64] that provides access to mythic time within which the hero 'may be said to have died to time and returned to the World Womb, the World Navel, the Earthly Paradise.'[65] In their respective quests Tolkien and Pullman each employ the motif of passage to

[59] W.H. Auden, "The Quest Hero," *The Texas Quarterly*, Vol.9 (1962), pp.81-93. Rprt. In *Tolkien and the Critics*, ed. Neil D. Isaacs and Rose A. Zimbardo (Notre Dame: University of Notre Dame Press, 1968), p.44.
[60] Timmerman, p.93.
[61] Joseph Campbell, *The Hero with a Thousand Faces*, Bollingen Series XVII, 3rd ed. (Novato: New World Library, 2008),p.276.
[62] Campbell, p.23.
[63] Campbell, p.32.
[64] Campbell, p.74.
[65] Campbell, p.77.

otherworldly realms where the hero encounters profound insight into the very nature of ecology, which leads to their own symbolic rebirth.

Inspired in part by Campbell's theories, Rachel McCoppin's recent study *The Hero's Quest and the Cycles of Nature: An Ecological Interpretation of World Mythology* (2016), marries quest structure to ecological structure. McCoppin acknowledges a debt to Campbell's writing about hero myth, but focuses specifically on an ecological interpretation of archetypes. She measures what she terms 'botanical heroism' through the extent to which the hero's example symbolically mirrors the cycle of nature. McCoppin assesses how various hero myths represent the subjugation and reconciliation of the hero figure to the natural cycle of growth, maturity and mortality. The hero's ultimate willingness to submit to mortality in the service of a greater cycle of renewal emerges as a central theme. McCoppin includes the figure of Christ in her assessment of botanical heroism, through his self-sacrifice and resurrection that takes place in Spring. McCoppin notes that Christ's passion includes common themes found in resurrection mythology related to divinities that in the process sacralise nature. Notably these themes include the presence of female characters at his rebirth and the symbolic importance of the tree as a marker of renewal.[66]

McCoppin's method of extracting ecological currency from the structure of myth has some appeal. However the relationship of the hero to the structure of the myth does not make clear whether the divine hero sanctifies the seasonal cycle or vice versa. Other questions arise over the temporal particularity of the model employed. The

[66] Rachel McCoppin, *The Hero's Quest and the Cycles of Nature: An Ecological Interpretation of World Mythology* (Jefferson: McFarland and Co Inc, 2016), pp.149-150.

term ‘botanical hero’ fits with a cycle of nature heavily reliant upon parallels between the growth and development of the hero and the seasonal growth and development of vegetation. As Karen Armstrong has written the cycle of nature was vital to literal belief in myth in the West prior to the sixteenth century.[67] This dates to a time before the advent of a capitalism and technology that began to replace the vulnerable traditional agrarian economy’s annual dependence upon the growth of crops. The seasonally cyclical model therefore suits McCoppin’s identifying of botanical heroism as a model in pre-industrial myth, but does not necessarily lend itself to extracting ecological meaning in a post-agrarian context in which twentieth-century fantasy quest is written and digested. As previously identified in this chapter alternative measures of authenticity and models of ecology have developed that contest definitions of ecology. Even if Tolkien celebrates agrarian culture in *Rings* he does so while understanding that this ecological model exists in conflict with alternative contemporary conceptions of authenticity.

McCoppin’s conception of botanical heroism draws heavily upon mortality as proof that humanity fits within, rather than above, a universal system of nature. It locates ‘human beings as equal to any biological element within the natural world (and) teaches audiences that if they indeed accept this view, they will find everlasting life – not in the preservation of one’s specific identity, but in the balanced system of nature.’[68] This comprises a fatalistic bent too intent on submission and humility. This focus on disempowerment neglects to engage with the power that humanity has come to exert over nature in the Anthropocene Age, or the antithetical debate about authenticity within which responses to this are framed. Submission to the cycle of

[67] Karen Armstrong, *A Short History of Myth* (Edinburgh: Canongate, 2005), p.125.
[68] McCoppin, p.162.

nature fails to capture nature's fragility, and the responsibility of humanity toward nature, as well as ultimately submitting to the overarching cycle of life and death.

McCoppin's botanical heroism involves interpreting recurring motifs in myth that cultivate ecological consciousness. McCoppin acknowledges that the examples comprise heroes who typically only partially manage to embody botanical heroism. An example that illustrates this is McCoppin's assertion that 'Odysseus comes close to reaching a state of botanical apotheosis but ends up failing to fully realize enlightenment, because he always ends up rejecting the final leap, resorting again and again to his old persona, much like Achilles did.'[69] Of course in referring to pre-scientific myth the fallibility of the hero does not map to conflicting understanding about authenticity, because the myths she cites are located in an age before the theory of evolution. Rather than function as the personalization of nature the botanical hero appears to struggle with nature before finally reconciling to personal mortality leading to symbolic rebirth that the hero can share in only vicariously. In short it focuses too intently of the figure of the hero and tries to force them into a particular view of nature. The aim of this study is to identify an alternative model against which the quest hero interacts that articulates ecology as multifaceted.

In this study I retain McCoppin's overall methodology of identifying parallels between the course of the hero's quest and ecological structure. Due to the aforementioned reservations of mapping twentieth-century quest to the cycle of nature I use what I term an eco-labyrinthine analysis. The labyrinth paradigm fits the complex and contested reference point for ecological authenticity in the twentieth century. Just as

[69] McCoppin, p.104.

definitions of ecology are contested by the equilibrium versus evolutionary dynamism debate, so the term ‘labyrinth’ divides between unicursal and multicursal forms. The latter comprise mazes where multi-directional potential, and the prospect of dead-ends mirrors evolutionary structure. The former meanwhile maps to an original conception of the labyrinth as a regular, balanced structure, used since pre-history to pictorially represent nature and cosmology as a sacred pattern. Such unicursal labyrinths include within them the cycle of nature, but also gravitate towards a defined central point of enlightenment and return. The concentric loops of the unicursal labyrinth progressively lead towards the central point. The labyrinthine journey was adopted by Western medieval Christianity to represent the redemptive journey of Christ, to be followed by the faithful in liturgical ritual. As such the labyrinth encompasses the resolution of the Fall, and engages with the eco-theological debate over reinterpreting Christian religion toward a less anthropocentric orientation. The labyrinth differs from the cycle of nature in that it serves as a model for enlightenment. The labyrinthine path moves inexorably towards a central point of revelation leading to transformation. The cycle of nature as articulated by McCoppin by contrasts fixates upon fatalism and ultimate realisation and mortal acquiescence to nature.

The following chapter will expand upon the symbolism and utility of the labyrinth. However I will briefly outline here the choice of the labyrinth as a better ecological model than the cycle against which to read the twentieth-century hero’s quest. As a dichotomy it reflects the tension over rival definitions and models of ecology.

It also brings two antithetical models together in one place as binary oppositions that create meaning in relation to each other. The labyrinth pattern was used as a model for Christian quest literature. As a term the labyrinth evokes in popular understanding the possibility of fallibility, confusion and moving in the wrong direction, whereas the deterministic cycle of nature suggests immanence, singularity, regularity and control. The Anthropocene Age challenges the integrity of the cycle with its assertion that the direction of human progress participates in structural terms, and that the direction taken has created an ecological crisis. I read the labyrinth dichotomy as a binary opposition about structure that accounts for tensions between apparently antithetical definitions of ecology. I will suggest that the unicursal, spiritual labyrinth structure appears as a cipher for ecological structure in *Rings*, while the dynamic, multicursal maze does the same in *Materials*. Yet, while oriented primarily toward one structure or the other the labyrinth acts as a continuum. It brings together the two texts in a labyrinthine spectrum where models vie against each other and inconsistencies emerge that challenge the absolutism of each ecological perspective of structure.

Chapter Two

The Formation of the Labyrinth Paradigm

The previous chapter outlined the reasoning behind reading the structure of the quest as the realisation and reflection of ecological order. I concluded by proposing that the labyrinth comprises a fitting symbol to represent ecological structure.

The following two chapters identify the characteristics that form the labyrinth paradigm and provide illustrative examples of eco-labyrinthine exegesis. This chapter traces the mythological associations of the labyrinth as a concept to represent and engage with ecological/cosmological structure and authenticity. I select and present milestones in the development of a labyrinthine consciousness. I offer a mini-illustration of an eco-labyrinthine approach to the seminal mythological Cretan myth of the labyrinth, before focusing on the Christian appropriation of the pagan labyrinth in the Middle Ages. The weight of attention given to Christian labyrinth symbology reflects the arguments over the centrality of the religion in forming underlying views of relationships with non-human nature, and the search for a Christian approach that eschews domination and anthropocentricism. I continue by identifying a specifically English form of 'green' labyrinth and its appearance in folklore and in Milton's epic *Paradise Lost*.

In the second half of the chapter I turn to the growth in popularity of the multicursal labyrinthine form and look at its suggestive currency for representing authenticity. In the early modern period the labyrinth maze encapsulated the growth of enquiry into the complexity of nature, choice, freewill and the divine role of humanity as co-

creator. As we saw in chapter one this thirst for knowledge would challenge the idea of a fixed, cosmic order, to replace the sacred apprehension of nature with the evolutionary model of possibilities. The chapter ends by summarising the features of the labyrinth dichotomy, preparatory to the following chapter that considers the validity of an eco-labyrinthine reading of *Rings* and *Materials* as a reaction to the Anthropocene.

As a paradoxical dichotomy the labyrinth defies a simple dictionary definition.[70] It encompasses a dichotomy of two opposing views of structure. On the one-hand the unicursal labyrinth, mappable and explainable, comprises a series of concentric loops that gravitate inwards towards, or revolve around, a central point. The single revolving track represents regularity and perfect order. Against this the multicursal maze eschews regularity in favour of dynamism, choice, uncertain progress, and the possibility of error and dead-ends.

These rival claims for defining the term 'labyrinth' mirror the fundamental divide in ecocriticism over ecological structure. Thus the unicursal labyrinth fits with the regular cycle and equilibrium model of ecology, against the multicursal maze's metaphorical representation of evolutionary progress. When we speak of labyrinths typically we employ both understandings of the term, we mix them together in the same way that we mix definitions of ecology and try to reconcile order and balance with disorder and dynamism as markers of authenticity.

[70] Tony Ullyatt, 'Labyrinths and Mazes as Metaphors: Some Preliminary Problems of Definition and Meaning', *Journal for New Generation Sciences*, 8.1 (2010), 272-285 (p. 273).

A labyrinthine structure typically envelops and confuses those within its bounds. This is equally true of the unicursal labyrinth and the multicursal maze. The unicursal labyrinth as a frame always limits vision to horizons that create uncertainty as to what is around the corner, while the maze goes further to suggest that nothing is fixed. The order of the former, readily apparent when viewed from an elevated position, from within requires decoding progress to identify a series of regular rotations.

The earliest labyrinth patterns appear as unicursal spiral designs in prehistoric cave art, interpreted as representing authentic and sacred ecological order. Steve McCaffery conjectures that 'There is a strong likelihood that the labyrinth developed out of cave cults in which winding, natural caverns symbolized the bowels of the earth or the uterus of the Earth Mother'[71] congruent with fertility rites based around a feminised worship of a divine earth. Hermann Kern interprets the persistence required to follow the unicursal, tortuously winding path to its conclusion as 'symbolic of …conformity to natural laws.'[72]

The introduction of complexity into the labyrinth paradigm owes much to the influence of the Cretan myth of the labyrinth. The Cretan labyrinth exerts a powerful influence on the understanding of labyrinthine form and function by bringing together unicursal and multicursal forms. It tells of a crisis caused by a disruption of natural order and the quest to undo the creation of an unnatural mythical creature that poses

[71] Steve McCaffery, "To Lose One's Way"(for snails and nomads): The Radical Labyrinths of Constant and Arakawa and Gins, *Interfaces*, 21-22 (2003), 113-144 (p. 113).
[72] Hermann Kern, *Through the Labyrinth: Designs and Meanings over 5000 Years*, ed. by Robert Ferre (New York:Prestel, 2000), p. 30.

a mortal threat. As with many popular myths, the Cretan myth appears in a number of slightly different variations. The two most notable sources of the myth that inform this reading are the chapter on Theseus in *Plutarch's Lives*[73] which chronicles various accounts and sources, and the myth's poetic rendering in Book Eight of Ovid's *Metamorphoses*.[74] Likewise the myth has inspired diverse interpretations and mythological commentary. Retaining a hold on the imagination and on the search for meaning, Penelope Reed Doob writes of how in the Christian Middle Ages moral and spiritual lessons were extracted from the Cretan myth.[75]

The myth of the Cretan labyrinth comprises a seminal milestone in the development of subsequent perceptions of labyrinthine features. In focusing on its link to ecology I will contrast Rachel McCoppin's reading of the myth from the perspective of botanical heroism with an alternative eco-labyrinthine exegesis. McCoppin's analysis of botanical heroism in the Cretan myth focuses on the lives of the quest heroes Theseus and Ariadne. Wedded to a botanical cycle model focused on the hero's relationship with mortality McCoppin regards the Cretan labyrinth as an underworld representing death, which Theseus chooses to face as his heroic task. McCoppin regards the Minotaur, half-human and half animal, as representing an internal struggle between civilised and feral nature.[76]

[73] Plutarch, *Plutarch's Lives (Volumes I and II),* trans by John Dryden, ed by Arthur Hugh Clough (Digireads.com Publishing, 2018), pp.14-27.
[74] Ovid, *Metamorphoses: A New Verse Translation*, trans by David Raeburn (London:Penguin Books, 2004), pp.300-306.
[75] Penelope Reed Doob, *The Idea of the Labyrinth from Classical Antiquity through the Middle Ages* (London: Cornell University Press, 1992), pp.148-155.
[76] McCoppin, p.77.

Theseus thus signifies the apparent triumph of civilised man, returning victorious out of the labyrinth. In McCoppin's cyclical model of botanical heroism this represents the apogee of the hero, the point at which the hero blossoms, before an inevitable fading into autumnal reflection and reconciliation to death in winter. McCoppin ultimately rejects Theseus as a botanical hero due to his subsequent pronounced lack of reflection, enlightenment, and his failure to acknowledge his own mortality as an aspect of his quest experience.

McCoppin draws upon the contextual significance of Greek culture and mythology to expand upon the meaning of the text. She identifies the symbol of the bull as a figure representing Minoan civilization, and its position relative to its rivals, suggestive of a morphological historicism. She also looks to wider mythological connections between characters and the Greek gods. As a result she proposes Ariadne as a better representative of botanical heroism than Theseus. Ariadne, as Theseus' betrayed accomplice, ultimately achieves oneness with nature through marriage to the god Dionysus, who confers her with immortality as a symbol of continuing divine order.[77]

The reason for setting out McCoppin's analysis of the Cretan myth is to identify the shortcomings of its anthropocentric focus, before offering my own ecological exegesis based on labyrinthine structure. McCoppin employs the botanical cycle to represent human heroism in natural terms, whereas a central tenet of ecocriticism is to adopt an earth-centred analysis, to let the earth speak and participate in the text. The botanical cycle appears to be an indirect connection, remaining passive and in the background. As a means of drawing an equivalence between ecological and

[77] McCoppin, p.85.

textual structure, an eco-labyrinthine analysis of the Cretan myth highlights the tension between fixed boundaries of nature and unnatural innovation. It also looks at how we perceive the environment and our place within it.

I offer an eco-labyrinthine reading to illustrate how structure may serve as the prime vehicle for representing nature in the Cretan myth. The myth essentially depicts a struggle between natural and unnatural forces and their problematic relationship with authenticity, typified by confusion and transgression. A simple breakdown of the myth highlights elements omitted or underplayed in a botanical hero analysis. Briefly, the Minotaur originates from the unnatural union between a bull and queen Pasiphae, brought about by subterfuge. The designer/architect Daedalus facilitates the queen's unnatural longing for the bull.

To contain the issue of this unnatural union Daedalus consequently designs the labyrinth as a prison and home for the Minotaur. The labyrinth Daedalus constructs serves as a separate world, but one constructed not by the gods but by the most skilled of human artificers. This pseudo-labyrinth symbolises the fallibility and hubris of human ecological and environmental engineering. As a world created by human agency the labyrinth contains within it an unnatural, human-made threat, which requires the sacrifice of human life. The mortal danger from the changed nature of the world represents an unanticipated outcome of human meddling with nature. The labyrinthine world in this sense comprises a fall with the consequent advent of error and confusion. Structure itself begins to be perceived as a palimpsest, as an overwriting of the natural structure rather than its' evolution. The new structure may be a temporary or local phenomenon, or indeed an illusion. John Heller notes the

long-observed paradox of ancient depictions representing the Cretan labyrinth in art as unicursal in contrast to the experience of the Cretan labyrinth as an inextricable puzzle to return to a redemptive path.[78] A single path labyrinth may have many loops, but it essentially requires only persistence and faith to pursue it from its centre to its entrance/exit. This suggests that blindness to perceiving authentic structure may be an intrinsic part of the myth.

As a result the Cretan labyrinth both lends from and alters interpretations of pre-historic labyrinth imagery. Theories abound as to whether the Cretan labyrinth comprised a walled structure within, or beneath, a palace, or as the subterranean passages of a cave.[79] If the latter, then the Cretan labyrinth exchanges the image of the womb of nature, the spring of life, for that of the inauthentic man-made prison, which serves as a place where humans are sacrificed to an unnatural force.

In response to this crisis Theseus meets the criteria of the quest hero. His task involves conscious self-sacrifice in his embrace of mortal danger, and employs the typical features of the quest; the singular destiny of the hero; the activity of searching; uncertainty; the powerful enemy; the necessity of assistance. An ecological imperative of destroying the unnatural threat to life drives the hero to action. Success will extend beyond the immediate quest to represent the triumph of eternal values.

[78] John L. Heller, ' Labyrinth or Troy Town?',*The Classical Journal*, 42.3 (Dec 1946), 122-139 (p. 126).
[79] Kern, pp.42-43.

Beyond his role of slayer, Theseus' success lies in his ability to navigate a way into and out of the labyrinth, symbolic of rebirth and renewal. He achieves this on behalf of humanity only with the assistance of a female counterpart, King Minos' daughter Ariadne, who is also the Minotaur's half-sister. This familial relationship adds a further reference to legitimacy. Ariadne assists by supplying navigational assistance and weaponry. To accomplish the task each play a crucial role while their fate remains tied together. These elements of voluntarism and fellowship in navigating a labyrinthine route to complete a redemptive quest reappear in the relationships between Frodo and Sam in *Rings* and Lyra and Will in *Materials*.

Following his victorious re-emergence out of the labyrinth Theseus takes Ariadne to the island of Delos. Here symbolically the conquest of the labyrinth takes on a broader ecological aspect linked to ritual. In the rite of passage the final stage requires a symbolic union or reconciliation take place. At Delos, the couple engage in a celebratory dance that mimics the mating ritual of the Crane, which has been described as mirroring the rhythmic progress through the alternating directions of a seven-circuit labyrinth.[80] This ritual re-enactment of the quest through labyrinthine movement associated with nature and fertility provides echoes of the prehistoric ecological associations of the labyrinth. If the story had ended here then it would have signified restored ecological harmony. However, rather than embodying the lessons of the quest, Theseus remains an example of human fallibility and ignorance.

[80] Helen Curry, *The Way of the Labyrinth: A Powerful Meditation for Everyday Life* (Harmondsworth: Penguin Compass, 2000), p. 29.

A labyrinthine quality of confusion and disorientation re-emerges as Theseus abandons Ariadne and takes a separate path in life. The erstwhile hero exhibits forgetfulness, selfishness and confusion. He sails back to his father Aegeus under black sails, interpreted as signifying his death which leads to his inconsolable father's suicide. Theseus continues to reveal a lack of understanding and error in subsequent misadventures which culminate in his murder, that precisely mirrors the demise of his father heightening the sense of generational fallibility that undermine notions of human progress.

The Cretan myth similarly does not end well for the labyrinth's architect Daedalus. Imprisoned in his own maze as punishment, yet unable to find the way out, the story of how he crafts wings to usurp the limitations of nature and escape is well known. This application of artifice and technology to address a problem caused by the same principles inevitably leads to disaster. His son Icarus disregards his father's warning of the bounds of possibility and ascends too close to the heavens which brings about his death. The example of Daedalus raises wider questions over humanity's hubristic sense of being able to control the environment, contain human-made threats, and responsibly use technological advances.

The legacy of the Cretan labyrinth myth appears in the appropriation of the labyrinth by Christianity in the Middle Ages. Symbolically the fallen figure of Theseus in the labyrinth was replaced by that of the redeemer Christ, while the unicursal labyrinthine path was invested in sacred significance as reflective of authentic, divine order. The Christian application of the labyrinth specifically relates to the mythology of the Fall and recovery.

The myths of Classical culture, too valuable and popular to be expunged, were reappraised and reinterpreted for a Christian age. The rationale for reinterpreting and incorporating the best of both the classical and pagan worlds was to reimagine them as eternal truths albeit imperfectly perceived prior to Christ's revelation.[81] As a result the Church would ultimately replace the fallen heroic figure of Theseus in the labyrinth with the true saviour Christ. The labyrinth would, for some Christians in the Middle Ages, come to represent the journey of Christ's life. As a metaphor the labyrinth, for a while, would be seen as a cipher of divine design encompassing the cycle of nature, cosmology and rebirth. Christ's adherence to this path served as an example of redemptive quest to restore authentic order. To cement the labyrinth as a Christian symbol the figure was subtly adapted to incorporate the cross to create the 'Chartrain type' named after its most famous expression in the pavement within Chartres Cathedral.

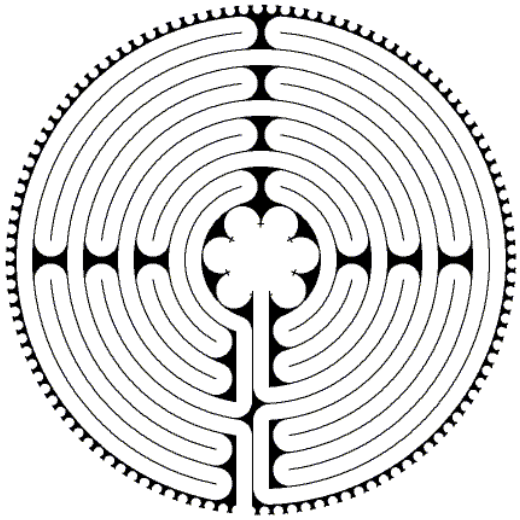

Figure 1. Chartrain labyrinth[82]

[81] Craig Wright, *The Maze and the Warrior: Symbols in Architecture, Theology, and Music* (Cambridge, Massachusetts: Harvard University Press, 2004), p.76.
[82] http://www.astrolog.org/labyrnth/maze/chartres.gif [Accessed: 27 January 2018].

At its height of popularity in the Middle Ages the labyrinth appears ubiquitous as an esoteric Christian cipher. It appears as a diagram in Christian manuscripts used to calculate the date of Easter,[83] as a processional design in the nave of the Church,[84] as the compositional structure for Church music,[85] in Christian philosophy as a mode of learning through repetition[86] and as the stage for Christian quest literature.[87] Italian and French Cathedrals would feature the labyrinth pattern in the paving of their entrance nave for more than decorative effect. Symbolically the nave serves as a space all would encounter unlike the altar which was restricted to the clergy. The labyrinth represents the universal applicability of Christ's journey through life and rebirth. The standard design of Western Church labyrinths delineate a passage that occasionally steers in a northerly or southerly direction but predominantly follows a course from west to east and back.[88] Frodo's quest in *Rings* follows this same general trajectory. It has a focus on a goal in the east and return to a home in the west. Lyra's journey in *Materials* proceeds in a predominantly northerly direction in rejection of the eastern tradition.

The Church labyrinth symbolically reflects the pattern of the cosmos. The labyrinth's circuits were chosen to reflect the orbits of the planets, as identified at the time of the Middle Ages, naturally embossed with the sign of the cross.[89] The Christianising of

[83] Kern, p.110.
[84] Wright, p.47.
[85] Wright, p.107.
[86] Doob, pp.67-82.
[87] Doob, p.225.
[88] Wright, pp.18-19.
[89] Doob, p.130.

the labyrinth alters its shape from elliptical to circular. The circle as a symbol indicates 'unity and divine perfection, for the circle knows no beginning or end.'[90]

The Church labyrinth serves a ritual function in outlining a rite of passage toward union with the divine. Procession within labyrinthine boundaries signifies submission and arduous progress that leads to enlightenment at the centre, as the fulcrum around which the circuits revolve. Passage takes place over an extended time, leading back and forth, edging circuitously ever nearer the centre. In reflecting planetary orbits the labyrinth evokes a sense of authentic order and unity, and of annual cycles heightened through the celebrant passing repeatedly past adjacent points. The interpretation of the image of the Church labyrinth as a substitute site for pilgrimage became popular in the nineteenth century, although opinion divides over whether this interpretation rests on fact or romance.[91] Depictions of labyrinthine pilgrimage reveal the penitent traversing the circuit of the labyrinth on their knees. The voluntary relinquishing of stature accentuates the act of submission to the divine path. It requires patience, greater effort and invites reflection. In addition to the penitent as belittled and subservient, the diminution of stature evokes the perception of the adult returned to the state of the innocent child being directed on an uncorrupted path. The centre represented Christ, as Helmut Jaskolski observes his monogram IHS was embossed in the centre of the labyrinth.[92] The ultimate aim of labyrinthine passage assumes a spiritual imperative and an elevated meaning congruent with a quest, and not an adventure.

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[90] Wright, p.23.
[91] Doob, p.121; Wright, p.47.
[92] Helmut Jaskolski, *The Labyrinth: Symbol of Fear, Rebirth and Liberation*, trans. By Michael H. Kohn ((Boston: Shambhala Publications Ltd, 1997), p.68.

The paschal significance of the labyrinth goes beyond physical ritual. The figure of the labyrinth symbolically appears in Christian manuscripts that function as a 'computus' to calculate the date of Easter based on the movement of the planets.[93] The significance of the labyrinth to Easter, the culmination of Christ's redemptive sacrifice to undo the Fall and symbolise victory over death, was most expressly illustrated in Medieval Easter ritual. This saw clergy perform a winding 'paschal dance' through the circuits of the Church labyrinth. With its echoes of pagan Spring rites this was not without controversy. The potential for the labyrinth to subvert or support Christianity was keenly felt by those in control of the Church. Church authorities increasingly sought to discourage the practice seeing it as proceeding from pagan custom even if in use as emblematic of Christ's redeeming sacrifice.[94] The labyrinth thus provides a symbol of unorthodoxy and assimilation of the pagan past, an alternative, subversive and ultimately unorthodox form of Christianity.

The paschal dance celebrates Christ's harrowing of hell and resurrection. These themes have their echo in *Rings* and *Materials*. In the former Aragorn treads the Paths of the Dead and lifts the curse under which they lie. In the latter Lyra performs Christ's role of freeing the dead from purgatory. The popularisation of the concept of purgatory had introduced a martial element in the history of the Christian labyrinth. The labyrinth became associated with Christ's Theseus-like quest to free captives[95] and popularised the chivalric image of the Armed Man within the labyrinth in the form of the spiritual knight.[96] The replacement of the figure of Theseus with Christ symbolically shifts the conflict and suggests that the Minotaur stands for Satan.

[93] Kern, p.110.
[94] Doob, pp.124-125.
[95] Wright, pp.78-79.
[96] Wright, p.89.

Consequently the misapprehension of the labyrinth as complex, disorientating, inescapable and a place of mortal peril is hell. Meanwhile the unicursal pictorial representations of the labyrinth reveal a regular structure within which alternative choices are a misleading illusion.

The diversity of Christian applications of the labyrinth in the Middle Ages illustrates their significance as a religious metaphor, extended as the structural basis for Christian pedagogy, devotional music and quest literature. Doob's exegesis of Boethius' *Consolation of Philosophy (*c.524*)*, which pre-dates the Church labyrinth craze, leads her to suggest that the text comprises a 'central text in labyrinthine literature.' [97] Doob perceives Boethius's argument in the *Consolation* as leaning heavily on the labyrinth tradition. It does so, she claims, through depicting the chaos of the world as an illusion, caused by blindness towards divine unicursally labyrinthine cosmic pattern consequent to fallen humanity's multicursal labyrinthine mind.[98] Learning therefore comprises a way of rediscovering elusive order, through retracing steps that lead to the identification of recurrent images or examples as the repetition of the message. The pedagogical method of returning to previous arguments, and learning lessons by repetition, illustrates an intellectually labyrinthine rite of passage. The *Consolation* also offers a structural comment on the value of art as a means of conveying transcendent order. The text alternates between prose and poetry, and Doob writes of how 'The poetry, so often the vehicle for transcendent visions of cosmic order, suggests pattern, and the prose labors along a twisting path with a more constrained field of vision.'[99]

[97] Doob, p.255.
[98] Doob, p.257.
[99] Doob, p.269.

Craig Wright notes that composers of devotional music into the early Renaissance purposely appropriated labyrinthine rhythm to underline the divine structure of their work. The rhythm produced by the regular turns of the labyrinth transform it from a passive image to one full of life. The frequent loops in the circuit provide the labyrinth with a pulse. The preoccupation with the symbolism of the labyrinth in the Middle Ages influences music which follows the same back and forth pattern. Chants appear in order to mirror the retrograde motion of walking the labyrinth[100] and restates the unity of the circle, of endings producing beginnings in a holistic, recurring predetermined chain. An example of this can be found in the work of Guillaume Du Fay, whose composition *Missa L'Homme Arme* (c.1460) uses retrograde motion to recreate the sense of back and forth rhythm characteristic of traversing a unicursal Christian labyrinth. Music too takes a central role in the development of Tolkien's Middle-earth cosmology where harmonious melody creates the world.

The same impulse to appropriate the labyrinth to indicate the doctrinal validity and authenticity of artistic work appears in medieval quest literature. Doob identifies commonalities between labyrinths and quests as each promise the attainment of a goal only after surmounting difficulties, repeated delays and errors. Success in both cases requires a mix of persistence, guidance and adherence to a grand design. Doob notes the difference between particularly and incidentally labyrinthine texts in the extent to which the former are unusually circuitous, and evoke parallels with the Cretan myth. She concludes by stating that truly labyrinthine quests refer to the idea

[100] Wright, pp.106-109.

of a ‘grand design’ which rests upon the architecture of order (authenticity). The quest according to Doob works with this structure as ‘the questers move to enact or subvert the overarching pattern by their choices and persistence.’[101]

Doob devotes several pages to reading the labyrinthine qualities of *La Queste del Saint Graal* (anon 1225). She finds in this Arthurian quest qualities, whether intentional or unconscious, which support a labyrinthine reading. The necessity of the circuitous journey serves as instructive and necessary to fulfil the quest, and conveys the nature of understanding as a process, without short cuts. The *Queste* recalls the harrowing of hell as part of its scheme through Galahad’s freeing of the prisoners in the Castle of Maidens, however the freeing of humans from captivity is only part of the cycle of the quest. Success ultimately depends upon finding the unicursal path within a multicursal terrain.[102] Doob notes that the *Queste* repudiates the option of an individual choosing the correct path as this would elevate the quester and ‘merit salvation without grace’[103] leading to excessive pride and hubris. In its place providence and prophecy underpin the submission of the chosen quest hero to follow the path appointed. This immanent design frames the questers search for meaning. The digressions, complexities and wandering by roundabout courses all act to impart labyrinthine learning, and instil the need for patience in order to make progress.

These examples from pre-reformation Western European Christendom collide with the labyrinth as a specifically English phenomenon. Whereas the figure of the

[101] Doob, p.176.
[102] Doob, p.183.
[103] Doob, p.185.

labyrinth appeared inside continental Churches, as a reflection of cosmological order, in England the landscape bore the image of the green turf labyrinth that appears in English folklore and mythology.

In the early twentieth century a revival of interest in these physical landscape features led to the publication of W.H. Matthews book *Mazes and Labyrinths* (1922), which claimed 'We have in England… a class of survivals peculiar to this country which may be regarded as the equivalent of the (Church labyrinth).'[104] Matthews writes of turf labyrinths as an enigma citing English antiquarian Dr William Stukeley's (1687-1765) observation that 'lovers of antiquity, especially of the inferior classes, always speak of 'em with great pleasure, as if there was something extraordinary in the thing, though they cannot tell what.'[105] Matthews' notes the frequent proximity of turf labyrinths to religious sites and ancient earthworks placing them within the orbit of the idea of belonging to the sacred landscape, while Wright suggests that they were used as a site of Christian worship.[106] The imprints of these turf labyrinths on the landscape are striking. They resemble the swirling lines of fingerprints, suggesting the handiwork of a creator. Matthews identifies 37 examples of turf labyrinths in his book 'in counties so widely separated as Kent and Cumberland.'[107] In claiming the turf labyrinth as English, Matthews refers to Dr Edward Trollope's (1817-1893) riposte to a rival claim made in 1858 claiming they were of Celtic origin. Matthews tells us that 'Dr Trollope ... referred to the wide distribution of these devices throughout England and commented on their total absence from Brittany,

[104] W.H. Matthews, *Mazes and Labyrinths* (Marston Gate: Forgotten Books, 2008), p. 67.
[105] Matthews, p.73.
[106] Wright, p.156.
[107] Matthews, p.74.

where, if they were of ancient Cymric origin, one would have expected to find at least some trace of them.'[108]

Common names of English turf labyrinths include 'Fairies Hill', 'Julian's Bower' and 'Troy Town'. The first of these is self-explanatory, Julian's Bower refers to the patron saint of hospitality while Troy Town alludes to the defences of the fabled walled city and its destruction effected from within. Troy Town also evokes links to the medieval myth that Britain was founded by the Trojan exile Brutus, as appears at the beginning of Tolkien's translation of *Sir Gawain and the Green Knight,* which illustrates the connection between classical and medieval folklore.[109] Sig Lonegren identifies the significance of the labyrinth to English national mythology in recognising Glastonbury Tor long associated with mysticism, the origins of English Christianity, and nationhood, as a compelling example of a turf labyrinth. Lonegren describes the Tor as 'the three- dimensional classical seven circuit labyrinth…the best-known full-size 3-D labyrinth in the world!'[110]

In the early English fairy tale *The Childe Rowland* the turf labyrinth appears as a vehicle for access to a treacherous fairy underworld.[111] To effect this passage requires an inversion of nature by traversing the labyrinth's circuits 'widdershins'; against the course of the sun. The dangerous fairy realm consequently represents the inverse qualities of the human world.

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[108] Matthews, p.86.
[109] J.R.R. Tolkien, *Sir Gawain and the Green Knight, Pearl, and Sir Orfeo*, trans by J.R.R. Tolkien, ed by Christopher Tolkien (London: Harper Collins Publishers, 2006), p.17.
[110] Sig Lonegren, *Labyrinths:ancient myths and modern uses*, 4th ed. (Glastonbury: Gothic Image Publications, 2007), p. 3.
[111] Joseph Jacobs, 'Childe Rowland', *Folklore*, 2.2 (1891), 182-197 (p. 191).

While the ubiquity of the labyrinth symbol in Christian iconography was eventually shattered by the iconoclasm of the Protestant Reformation, the English Puritan John Milton employs the metaphor in his epic treatment of the Fall in *Paradise Lost* in a way that confirms rather than subverts its Roman Catholic Christian symbolism. In Book II (558-561) of *Paradise Lost* Milton describes his fallen angels as trapped in multicursal mental mazes of their own making as a result of rejecting divine order. The mental maze symbolises the devils' struggle for autonomy, and represents a desire for freedom without bounds that appears adjacent to text that speaks of the fallen angels' environmental exploitation.[112] The unicursal labyrinth by contrast appears as a positive proof of divine harmony and redemption in *Paradise Lost*. To describe celebrations of the advent of Christ in *Book V* Milton refers to music, dance, the cosmos, and divine pattern:

> In song and dance about the sacred hill -
> Mystical dance, which yonder starry sphere
> Of planets, and of fixed, in all her wheels
> Resembles nearest; mazes intricate (V.619-622)[113]

These intricate mazes are further identified as being:

> ...yet regular;
> Then most when most irregular they seem

[112] John Milton, *Complete English Poems, Of Education, Areopagitica*, ed. by Gordon Campbell, 4th edn. (London:J.M.Dent,1998), p.187.
[113] Milton, p.266.

> And in their motions harmony divine
> So smooths her charming tones that God's own ear
> Listens delighted... (V.624-627)[114]

Other green applications of the labyrinth appear in relation to the horticulture of the English garden. In one of the earliest books on the subject Thomas Hill's *The Gardner's Labyrinth containing a discourse of the Gardener's life* (1577) the labyrinth model represents natural laws and rhythms. For example, Hill advises on sowing crops according to the phases of the heavens to assure their growth.[115]

The unicursal labyrinth points to a divine ordering of nature that could be discovered by careful study to resolve confusion and error. As an idea of all-encompassing holistic order it envelops humanity within a wider structure. The gardening example illustrates how humanity might profitably benefit from labyrinthine knowledge. While the Christian tradition partly reconciled itself to subjugation to such an authentic order, the legacy of its myth of origins and Fall pointed to existence framed within an imperfect world. Confused ideas over human dominion and freewill, combined with an impetus to discover God's laws through interrogating nature, pointed in another direction. A direction framed by authenticity of human dominion framed by diverse inquiry and adaptation.

The idea of Eden bequeaths the garden environment a Christian significance in relation to the condition and role of humanity. Sir Francis Bacon the father of modern

[114] Milton, p.266.
[115] Thomas Hill, *The Gardener's Labyrinth*, ed. by Richard Mabey (Oxford: Oxford University Press, 1988), pp. 66-69.

scientific methodology in England opens his treatise *On Gardens* (1625) by acknowledging that 'God Almightie first Planted a Garden.'[116] Keith Thomas identifies Bacon as motivated by the desire 'to restore to man the dominion over nature which he had supposedly lost at the Fall.'[117] Bacon uses *On Gardens* to set out his ideas about how to create the perfect garden environment. Bacon viewed nature as providing the materials upon which humanity could exercise its God-given dominion. The idea of improvement of nature, albeit in relation to human aesthetical preferences, undermines the concept of nature as pure, authentic and of fixed order. Bacon's model garden reflects his belief in progress through training nature to suit the needs of man. Anthony Quinton suggests that Bacon was 'the most confident, explicit and influential of the first exponents of the idea of progress.'[118]

Bacon also wrote fiction as a means of articulating scientific ambitions. In his utopian novel *New Atlantis* (1627) the idyll appears as a place of transformation. 'We have also means to…make divers new plants, differing from the vulgar; and to make one tree or plant turn into another.'[119] Baconian science offers the non-metaphysical prospect of regaining humanity's birthright by rediscovery of knowledge through experiment. In *New Atlantis* Bacon describes 'inclosures of all sorts of beasts and birds…for dissections and trials…Wherein we find continuing life in them, though divers parts, which you account vital, be perished and taken forth; resuscitating

[116] Francis Bacon, *Of Gardens; An Essay* (Memphis: J.Lane, 2010), p. 3.
[117] Keith Thomas, Foreword in James McConica, Anthony Quinton, Anthony Kenny and Peter Burke, *Renaissance Thinkers: Erasmus, Bacon, More, Montaigne* (Oxford: Oxford University Press, 1993), p.vii.
[118] Anthony Quinton, in James McConica, Anthony Quinton, Anthony Kenny and Peter Burke, *Renaissance Thinkers: Erasmus, Bacon, More, Montaigne* (Oxford: Oxford University Press, 1993), p.146.
[119] Francis Bacon, 'New Atlantis', in *Three Early Modern Utopias: Utopia, New Atlantis and The Isle of Pines*, ed. by Susan Bruce (Oxford: Oxford University Press, 2008), p. 179.

some that seem dead in appearance.'[120] Bacon's dispassionate regard of the non-human as resource influences the subsequent interrogative direction of science.

Peter Pesic has described Bacon's approach to science as represented through the metaphor of the labyrinth. Pesic suggests that:

> As their ancestor Daedalus built the labyrinth, Bacon calls on the new breed of scientist to breach that inmost sanctuary. In complex images, he calls them to pierce the veil of the temple of nature through their penetrating interpretations "preparing a way into her inner chambers" (4:124), into the very centre of the labyrinth[121]

Pesic goes on to note that Bacon's description of scientific endeavours in *New Atlantis* reflects a deciphering of nature carried out by a multitude of investigators following multiple lines of inquiry. Indeed Bacon has been attributed as contributing the seminal idea of the dividing labour in the pursuit of science.[122]Bacon's anticipation and validation of multicursal investigation to investigate and hypothesise about nature foreshadows that of modern scientific orthodoxy. The modern faith in science reflects the rigorous and minute knowledge accrued by specialists following particular lines of scientific investigation.

[120] Bacon, 'New Atlantis', p.179.
[121] Peter Pesic, The Clue to the Labyrinth:Francis Bacon and the Decryption of Nature, originally published by *Cryptologia*, July 2000. https://francisbaconsociety.co.uk/emblem-cipher/francis-bacon-and-the-decryption-of-nature/ [Accessed 28 March, 2021].
[122] Quinton, p.184.

Pesic also suggests that *New Atlantis* reflects the singularity of those able to decipher and incorporate the evidence collected into a holistic view of nature. 'Bacon gives images of these singular discoverers in his mythical tales, for the decipherers of the labyrinth and the solvers of the riddle are unique heroes, not to be confounded with their crews and companions, however invaluable.'[123] The access to knowledge therefore remained constrained. Instead of residing in the interpretations of theology by a priestly intermediary it shifted to faith in the legitimate interpretation of a select group, 'to those few who could follow the thread; the rest…must wait upon the disclosures of the scientists.'[124]

In this the singularity of the scientific discoverer mirrors that of the quest hero. In *Materials*, Pullman's embodiment of quest heroism within pre-pubescent, natural and innocent children authenticates the discovery of knowledge as an innate ability, rather than a learned enterprise, even if the children are themselves solely marked out for the quest. One way in which this manifests itself is in Lyra's ability to communicate with dark material through Mary Malone's computer. Jacques Attali writes of the computer as the embodiment of technological knowledge held in the form of labyrinthine connectivity.[125]

At around the same time as the appeal of religious metaphysical knowledge gradually gave way to scientific methods of comprehending the world, so the turf labyrinth went out of fashion and the green labyrinth now found expression through the vogue for the hedge maze. Here the human designer worked with nature to

[123] Pesic.
[124] Pesic.
[125] Jacques Attali, *The Labyrinth in Culture and Society:Pathways to Wisdom,* trans. by Joseph Rowe, (Berkeley:North Atlantic Books, 1999), pp.63-64.

create a puzzle to amaze and confound, through which to frame progress. The labyrinth became popularly associated with this model of repeated choices, leading to either progress or dead-ends. Enjoyment was found in the exercise of choice while repeated encounters with the same maze offered the prospect of mastery of its passages and thus regaining control and exercising choice to ensure progress.

In the early 1900's the most famous English hedge maze at Hampton Court was used as a model by psychologists in animal experiments to assess cognitive skills of animals. Rats were typically used as substitutes for human subjects to measure learning, decision-making and memory functions. As an expendable resource rats used in these scientific experiments were at times subject to maiming and blinding to assess the effects of damage, or of new drugs.[126] The maze in the guise of challenge and location of experiment has parallels in *Materials* which determines quest heroism as a test of the resourcefulness and intelligence of Lyra and Will. The latter particularly evokes parallels with the trial subject in his maiming and ability to use the sense of feeling to navigate between the maze of worlds. Through an eco-labyrinthine reading the joint protagonists' trials take on the appearance of an experiment to prove the worthiness of humanity to direct the course of progress.

The foregoing exposition has identified a number of features of an eco-labyrinthine paradigm; a unicursal model attuned to reflecting a harmonious, balanced structure of sacred nature discernible through its features of circuitousness, repetition, rhythm and submission; and, a multicursal maze model in which multiplicity reflects

[126] Daniel Engber, 'The End of the Maze: How the rodent labyrinth fell out of favor' http://www.slate.com/articles/health_and_science/the_mouse_trap/2011/11/rat_mazes_and_mouse_mazes_a_history_.html [accessed 1 November 2019].

the impact of choice, evolution, freewill, fluidity and ordered chaos. This duality in structure resembles the tension outlined in chapter one between equilibrium and evolutionary definitions of ecology. The following chapter engages with the application of a labyrinthine dynamic in the Anthropocene Age.

Chapter Three

The Eco-Labyrinthine in the Anthropocene

Martin Weiner suggests that the failure of scientific rationality and secular revolution in the England of the nineteenth century was due to its accommodation and assimilation with English society and institutions. Wiener concludes that as a result 'entrenched pre-modern elements within the new society, (provided) legitimacy to anti-modern sentiments.'[127]

The doubts over the extent to which scientific rules diminished the legitimacy of spiritual authority at the dawn of the Anthropocene era reflect uncertainty, intuition, and desire to invest the world with a sacred significance. The desire to commune with nature rather than to demystify and disempower it invigorated the Victorian spirit of democratic scientific inquiry where imaginative, scientific-fiction writers could act as co-inquirers with the scientific community. For example, on its formation in 1882 the Society for Psychical Research 'numbered distinguished writers and scientists among its membership.'[128]

The era's esoteric relationship with science was also illustrated in Helena Petrovna Blavatsky's critique of science *The Secret Doctrine* (1888) that locates theosophy at the intersection of mythic, spiritual and scientific knowledge. In the harnessing of electricity Blatavsky suggested science had in a limited way made manifest 'an

[127] Martin J.Wiener, *English Culture and the Decline of the Industrial Spirit 1850-1980* (Cambridge: University Press, 1981), p. 7.
[128] David Seed, 'Introduction', in *The Coming Race*, Edward Bulwer Lytton (Middletown CT: Wesleyan University Press, 2006) p. xxxiv.

intelligent force of formation'[129] that was endemic in the universe constituted in the Theosophical concept of Fohat: 'the personification of Fohat synthesizing all the manifesting forces in nature.'[130] Blavatsky claimed Fohat provides 'the key in Occultism which opens and unriddles the multiform symbols and respective allegories in the so-called mythology of every nation.'[131] Pullman's pseudo-scientific animation of dark matter suggests its inchoate scientific understanding and re-engagement with the Vitality debates of the early nineteenth century, 'the theories of a Life Force or Life Principle, which suddenly seemed of great contemporary interest.'[132]

Pullman's quest to invest evolutionary science with a spiritual significance reflects the epiphany that the identification of the Anthropocene represents in terms of human responsibility for ecological degradation. It reflects White Junior's contention that a new or revised spiritual appreciation of nature is a prerequisite for undoing ecological crises. Pullman's location of choice and alternative possibilities naturally refers back to the point of scientific and religious foment. While Pullman rejects Christianity as a doctrine he acknowledges its value as story. At the Oxford Literary Festival in 2012 Pullman maintained that exposure to biblical and Greek mythology should remain a central component in the education of children.[133]

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[129] Nicholas Goodrick-Clarke, 'The Esoteric Uses of Electricity: Theologies of Electricity from Swabian Pietism to Ariosophy', *Aries*, 4.1 (2004) 69-90 (p. 75).
[130] H. P. Blavatsky, *The Secret Doctrine,* Vol. 1 (London: The Theosophical Publishing Company Ltd, 1888), p. 672.
[131] Blavatsky, p.673.
[132] Richard Holmes, *The Age of Wonder: How the Romantic Generation Discovered the Beauty and Terror of Science* (London: Harper Press, 2011), p. 309.
[133] Hannah Furness, 'Philip Pullman: teach all children fairy tales and Bible verses' *The Telegraph* http://www.telegraph.co.uk/culture/books/9936241/Philip-Pullman-teach-all-children-fairy-tales-and-Bible-verses.html [accessed 30th September, 2015]

The same contemporary impulse saw the revival of the Church labyrinth as a reflection of change in Christian philosophy. Lauren Artress, the foremost champion of church labyrinths since the 1980's describes the labyrinth as providing a 'connection to the Divine…to find the vision of the future…of a thriving, healthy planet.'[134] Artress describes walking the labyrinth circuit as a three stage Christian rite of passage toward an authentic relationship with God.

The three-stage process of rite of passage comprises the standard understanding of the process of ritualized change and assimilation. Arnold Van Gennep describes this as separation – transition – incorporation.[135] Artress applies a Christian interpretation to the labyrinthine rite of passage as a process of purgation – illumination - union.[136] I would suggest that Artress's model fits with Tolkien's identification of the threefold purpose of faerie; recovery-escape- consolation.[137]

In describing the first stage of rite of passage as purgation Artress identifies the need to purge the labyrinthine quester of the centrality of the self. Purgation reflects the idea implicit in the Fall of choice and desire leading away from the authentic path. Recovery of the path requires a voluntary subjugation to boundaries, direction, rhythm, and persistence to complete the allotted course. The labyrinthine circuits restore the sense of natural rhythm to the reflective, spiritual quester. Tolkien defines recovery as the regaining of health by rediscovering an authentic

[134] Lauren Artress, *Walking a Sacred Path: Rediscovering the Labyrinth as a Spiritual Tool* (New York: Riverhead Books, 1995), p. 3.
[135] Arnold Van Gennep, *The Rites of Passage*, trans by. Monika B.Vizedom and Gabrielle L. Caffee (Chicago: University of Chicago Press, 1960), p.11.
[136] Artress, p. 28.
[137] J.R.R. Tolkien, 'On Fairy Stories', in *Tales from the Perilous Realm* (London:Harper Collins, 2008), p.371.

relationship with the non-human.[138] Recovery in these terms comprises a return to guiding principles that now run counter to the prevailing culture. Submission to the unicursal eco- labyrinthine path represents just such a recovery congruent with expelling the desire to deviate from boundaries and so distort the pattern of nature.

Artress describes the second stage of the Christian labyrinthine rite of passage as illumination, located at a central point or fulcrum. Illumination comprises an epiphany in understanding. Tolkien suggests that escape in faerie also represents insight through breaking free of the prison of a warped view of life present in contemporary European society, often demonstrated by a corrupted appreciation of nature.[139] Escape in *Rings* leads to the destruction of illicit power that informs the fallen nature of Middle-earth and involves a labyrinthine quest which employs a series of convoluted and disorientating turns.

Neither illumination nor escape comprises the goal for either Artress's labyrinthine quester or Tolkien's sojourner in the land of faerie. In each case the aim resides in using the experience to change perceptions of the real world, thus the return journey provides the opportunity to enact what has been learned. This is a feature of *Rings* where the destruction of the eponymous threat to Middle-earth serves as a prelude to the hobbits' return to tackle disorder in their own homeland. Artress identifies the final return stage of walking the labyrinth as comprising union with God. The centre having been reached the quester now returns along the same circuitous route symbolising continuing submission to the ordered path. Having ritually observed the circuitous boundaries in order to obtain the centre, the same

[138] Tolkien, 'On Fairy Stories', p.373.
[139] Tolkien, 'On Fairy Stories', p.379.

path now guides the way to the new goal, the return home. The equivalent function appears in Tolkien's description of faerie where the centre comprises a fleeting escape, whilst the goal comprises consolation as 'its highest function.'[140] The concept of consolation reflects Tolkien's acknowledgement that humanity remains in a post-lapsarian state. In correspondence he writes of the impossibility of fully recovering Eden, and of salvation as working through a spiral process. Tolkien demonstrates in the act of salvation in *Rings* the consequence of departure of spiritual beings (the elves) who are suited to Edenic existence and therefore do not fit within the laws that govern the earth. As I will go on to argue, this distinction between heavenly/immortal and earthly/mortal states explains why Tolkien's elves should be viewed with caution as exemplars of ecological virtue.

McCoppin identifies that 'many myths of the hero tend to follow archetypal patterns (that) repeatedly reveal a connection to the most basic laws of nature.'[141] In the botanical hero model the basic laws of nature are distilled into cyclical imperatives matched to the cycles of growth, strength, decline and death that lead to new life as the cycle begins again. Such a simplistic model does not engage with differences of opinion over the ultimate structure of nature. By contrast the labyrinth dichotomy represents the struggle between cyclical and stable, and evolutionary and dynamic, laws of nature. This dichotomy also conforms to principles found in the structural analysis of texts. Claude Levi Strauss defined mythology as working through symbolism to replicate fundamental structures or laws. At the core of his approach resides the identification of binary opposites that together create meaning. Not only do these opposites variously represent qualities of good versus bad, they also have

[140] Tolkien, 'On Fairy Stories', p.384.
[141] McCoppin, p.9.

the potential to identify inconsistencies that enable us to question the robustness of apparently polemical positions.

Strauss locates a structural reading as one that always privileges the structure as essential for internal consistency. He encourages an 'emphasis on form, on the primacy of relations over entities, and on the search for constant relationships among phenomena'[142] that in a green reading point toward an earth-centred ethos. Through the labyrinth dichotomy I employ a binary approach to *Rings* and *Materials* in subsequent chapters. I take inspiration too from Roland Barthes' encouragement to regard myth as built upon a contestable semiology. Barthes also raises the idea of a text having 'a sort of instinct of preservation in narrative which…always chooses the outcome which makes the story "go on."[143] Noting that such an obvious element is 'hardly studied at all' [144] Barthes refers to the structure as having 'uniquely in view the "salvation" of the narrative and not this or that character in it'[145] which by analogy might be extended to the preservation of ecological sustainability as the stage on which narrative activity takes place. Ultimately, Barthes argues that we should not regard authorial intent as necessary to prove because as 'we free the work from the constraints of intention, we rediscover the mythological trembling of meanings.'[146] Barthes encourages the search for signs that lead to the inference of structure through causing 'a second

[142] Clare Jacobson, 'Translator's Preface', in *Claude Levi-Strauss, Structural Anthropology*, trans. by Claire Jacobson and Brooke Grundfest Schoepf (London: Penguin Books, 1972), p.x.
[143] Roland Barthes, *The Semiotic Challenge*, trans by Richard Howard, (Oxford: Basil Blackwell Limited, 1988), p.139.
[144] Barthes,*Semiotic Challenge*, p.140.
[145] Barthes,*Semiotic Challenge*, p.140.
[146] Roland Barthes, *Criticism and Truth*, ed. and trans. by Katherine Pilcher Keuneman (London: The Athlone Press, 1987), p.77.

language – that is to say a coherence of signs – to float above the first language of the work.'[147] For Barthes, the key to identifying structural architecture is locating the centrality of an image that stands for the entirety of the structure/meaning as 'in the work 'everywhere' and 'always''[148] and not tied to the quantitative frequency of symbolism.

Strauss suggests that the same structural features appear across mythologies from disparate cultures, hinting at a universal, archetypal foundation to mythology. I confine my study to a comparative analysis of texts with a shared northern European Christian heritage, working within the frame of identifying a structural binary opposition that represents ecology. I make no claims of the archetypal veracity of the labyrinth in its appearance in the texts, and discount the possibility that the model was consciously adopted by the authors as a means to embed meaning in their texts.

Tolkien defended the liberty of the reader to ascribe meaning. In the foreword to *Rings*, Tolkien distances himself from the charge of writing the story as an allegory. At the same time he pronounced that the reader was at liberty to co-create meaning; 'I think that many confuse applicability with allegory, but the one resides in the freedom of the reader, and the other in the purposed domination of the author.'[149] Umberto Eco's analysis of the role of the reader identifies the various degrees to which texts remain open or closed to a reader's interpretation. Eco

[147] Barthes, *Criticism and Truth*, p.80.
[148] Barthes, *Criticism and Truth*, p.83.
[149] J.R.R. Tolkien, *The Lord of the Rings*, foreword to 2nd ed. (London:Harper Collins, 2001) p.xvii.

writes of the influence of context and 'the way that artistic forms are structured reflects the way in which science or contemporary culture views reality.'[150]

Eco goes on to identify a pre-industrial monotheistic Christian tradition of reading that reflects an ordered cosmological view of the world. Eco finds the reader in the Middle Ages engaging with texts on various levels; moral, allegorical and anagogical.[151] This diversity gives the appearance of empowering the medieval reader to interpret a deeper meaning within the text. Eco writes of how the reader 'might choose a possible interpretive key… He will use the work according to the desired reading (causing it to come alive again, somehow different from the way he viewed it at an earlier reading).'[152] However, while appearing to open the text to interpretation Eco warns that in reality the medieval text was strictly limited by the fixed meanings assigned to symbolism. Thereby the author ultimately retained control of meaning for their contemporary audience. The labyrinth of the twentieth century, as a paradox of binary definitions, places interpretation within a less certain context. Uncertainty reflects the competing claims to authenticity and the various components of interpreting texts.

Barthes argues that we interpret text through a combination of discrete braids that communicate on different levels. These include a semantic code that identifies elements that possess a property greater than itself; a symbolic code that provides an association with deep structural principles; and, a cultural code that works on the principle of shared experience/knowledge. Authorial composition comprises a

[150] Umberto Eco, *The Role of the Reader: Explorations in the Semiotics of Texts* (Bloomington: Indiana University Press, 1979), p.57.
[151] Eco, *Reader*, p.51.
[152] Eco, *Reader*, p.51.

mix of conscious and unconscious influences that reflect Barthes conception of a symbolic code and deep structural principles. Barthes describes how authors inherit a literary context as 'a multidimensional space in which a variety of writings, none of them original, blend and clash.'[153] From these materials authors attempt to impose meaning. *Rings* and *Materials* comprise suitable subjects to bring together through an eco-labyrinth analysis because of the polemical differences of their authors over ecological and cosmological models. Each text betrays an authorial intent toward didacticism. Tom Shippey describes *Rings* as Tolkien's attempt to present a vision of 'God's plan, an evangelica praeparatio …He knew his own country was falling back to heathenism…professorial preaching would make no difference, a story might.'[154] Shippey's thesis is attuned to Tolkien's belief in the power of the story[155] to convey elements of the immanent truth of Christianity. Millicent Lenz describes Materials as a 'myth about a transformation of consciousness… that reaches backward and forward in time, vivifies our experience of the "here and now", and ultimately shapes readers' perceptions of the world.'[156] Each author references the polemical vision in these works as subconsciously proceeding from and relating to a Christian model of authenticity. Pullman claims he 'just realised that in his patch Milton had been working on the same thing. And a long time ago the original writer of the book of Genesis had been

[153] Roland Barthes, *Image Music Text*, trans. by Stephen Heath (London: Fontana Press, 1977), p.146.
[154] Tom Shippey, *The Road to Middle-Earth*, Revised and Expanded, 2nd ed (London: Harper Collins, 2000), p. 209.
[155] Tolkien, *Letters*, p. 101.
[156] Millicent Lenz, 'Introduction: Awakening to the Twenty-first Century: The Evolution of Human Consciousness in *His Dark Materials Illuminated: Critical Essays on Philip Pullman's Trilogy*, ed by Millicent Lenz with Carole Scott (Detroit: Wayne State University Press, 2005), p. 4.

working on the same story.'[157] Similarly Tolkien writes of how, "*Rings* is of course a fundamentally religious and Catholic work; unconsciously so at first, but consciously in the revision."[158]

Susan Rubin Suleiman describes texts composed to convey a message in the category of the *roman a these*, i.e. a thesis novel. She describes this category as 'a particular kind of writing'[159] that takes a polemical standpoint according to authorial perspective. She writes of how such texts 'must possess a set of dominant traits that form a system'[160] where art lifts the text out of the realm of pure propaganda. There are elements of the *roman a these* about *Rings* and *Materials* where the authors artistically cloak polemic in mythological attire. Intent similarly mediates the way that the authors' engage with the unconscious influence of structural forms. This thesis chimes with Suleiman's professed aim 'to read certain works …in order to see to what extent they realize the models I propose and to what extent they constitute a … problem- in relation to those models.'[161]

Barthes' cultural code locates interpretation as working with ideas of legitimacy, identity, culture and counter-culture. *Rings* and *Materials* each reference themselves against debates about English identity. Among Tolkien critics a 'critical

[157] An Interview with Philip Pullman', 2007 <http://moreintelligentlife.com/node/697> [Accessed 27.9.11.]
[158] Tolkien, *Letters*, p.172.
[159] Susan Rubin Suleiman, *Authoritarian Fictions: The Ideological Novel As a Literary Genre* (Princeton, New Jersey: Princeton University Press, 1983), p.6.
[160] Suleiman, p.8.
[161] Suleiman, p.15.

consensus'[162] accept the essential truth of the author's correspondence with a potential publisher of an initial desire to: 'make a body of more or less connected legend, ranging from the large and cosmogonic, to the level of romantic fairy-story – the larger founded on the lesser in contact with the earth, the lesser drawing splendour from the vast backcloths – which I could dedicate simply to: to England; to my country.'[163] While Tolkien goes on in the same missive to self-consciously dismiss the idea as 'absurd'[164] the addendum leaves the suggestion hanging. *Rings* depicts the culture of Middle-earth as redolent of Anglo Saxon England. *Materials* anchors its multiple narrative lines to main characters that ordinarily inhabit parallel versions of England, one an imaginative reworking of the nineteenth century and the other a contemporary version. Tolkien and Pullman thus work with the idea of Edenic values through the more immediately accessible medium of invoking a historical English golden age. Raymond Williams writes of myths of alternative English golden age's as a contrast of 'old ways, human ways, natural ways' and 'progress, modernisation, development'[165] as a shared tension in romantic idealizations of both rural and urban environments. Nostalgic and mythical rather than necessarily factual relationships with the past apply to both country and city alike. 'It is the perception and affirmation of a world in which one is not necessarily a stranger and an agent, but can be a member, a discoverer, in a shared source of life.'[166] The return to a golden age does more than reflect it points to redemption through the lessons of the past. Romie Littrell describes how the golden age

[162] Michael D.C. Drout, 'A Mythology for Anglo-Saxon England', in *Tolkien and the Invention of Myth: A Reader*, ed. by Jane Chance, (Lexington:University of Kentucky Press, 2004) 229-248 (p. 229).
[163] Tolkien, *Letters*, p.145.
[164] Tolkien, Letters, p.145.
[165] Raymond Williams, *The Country and the City* (London: Chatto & Windus, 1973), p. 297.
[166] Williams, p.298.

'involves two perspectives: it looks backwards in time towards a lost paradise and forward towards an idealized future.'[167] Barthes invites us to become conscious of symbolism in terms of 'the awareness society has of it and the rights society gives it' [168] and while we need to be aware of the validity of a symbolic interpretation, we need to be open to that interpretation being subject to rival claims.[169]

I would like to end this chapter with the selection of a few brief examples of how the labyrinthine form has been invoked in literature during the Anthropocene era, concluding with how my application differs and extends criticism in this field. My research will question Mary Hackworth's identification of a shift in how the labyrinth appears in literature that begins during the Renaissance with the undermining of the unicursal and spiritual labyrinth, and proceeds in the nineteenth century and onwards by replacing the challenge of reaching the centre with the search to escape labyrinthine confines.[170]

I have confined myself to texts that overtly draw upon labyrinthine allusion because these explicitly illustrate the potential of the symbol to convey meaning. In line with the start of this chapter where I suggest that the Anthropocene has reintroduced doubt over a purely scientific account of nature I provide an extended eco-labyrinthine analysis of Herman Melville's *Moby Dick* (1851), to illustrate internal tensions between two alternative perceptions of ecological structure brought

[167] Romie Frederick Littrell, 'Cultural mythology and global leadership in England' in Kessler, Eric H.and Diana J.Wong-Mingji, *Cultural Mythology and Global Leadership*, (Cheltenham: Edward Elgar Publishing, 2009), 145-165 (p. 148).
[168] Barthes, *Criticism and Truth*, p.68.
[169] Barthes, *Criticism and Truth*, p.72.
[170] Mary Hackworth, *Solved by Walking: Paradox and Resolution in the Labyrinth* (Marston Gate: Amazon.co.uk, 2012), p.188.

together in one place. I then conclude by looking at twentieth century literary labyrinths as philosophical approaches to structure through Jorge Luis Borges' anthology *Labyrinths: Selected Stories and Other Writings* (2000), and in Umberto Eco's *The Name of the Rose* (1980).

Moby Dick offers an interesting example of the labyrinth metaphor and its symbolism employed to articulate human relationships with nature and authenticity. While the book has been identified as labyrinthine by some critics, little attention has been focused upon the potential of the epic text's ecological dyad aspect. A further justification for looking at *Moby Dick* in this study is the text's historical context at the nexus between religious and scientific understandings of the world at the dawn of the Anthropocene era. Hackworth acknowledges that reservations have been expressed about the legitimacy of assigning a labyrinthine significance to texts merely on the basis that they include repeated turns and complexity. She counters that the legacy of the labyrinthine concept in classical and medieval texts, both overt and inferred continues to function 'as a model for approaches to knowledge that define each successive age' and which maintains its 'archetypal integrity …across the ages.' [171] The labyrinthine text wends its way back to the starting point having transformed the consciousness of the hero towards the world.

One of the texts that Hackworth considers a central example of labyrinthine writing is *Moby Dick* (1851). Published in the middle of the nineteenth century, *Moby Dick* captures the zeitgeist of the rise of America, the forging of the nation and its relationship to the natural world. Melville's story of Captain Ahab's vendetta against

[171] Hackworth, pp.189-190.

the eponymous whale pits the domineering hubris of humanity against the natural world.

Melville employs labyrinthine imagery in a way that represents feral nature. The sea as an eternally wild, unadulterated environment speaks of non-anthropocentric authenticity. Melville returns again and again to spiral imagery, the cycle of tides, the rhythms of the sea as aspects of the journey, which Gregory Pritchard describes as 'tropes representing the intertwined and interconnected ecological quality of the world – the various images of weavings and circles.'[172] Pritchard neglects to make the link to an eco-labyrinthine dynamic even though the Cretan labyrinth image overtly appears inscribed as a tattoo on the body of the sailor Queequeg, an erstwhile cannibal, yet virtuous character who contrasts with the rational, modern, vindictive spite of Ahab.

Queequeg embodies the popular figure of the noble savage in the nineteenth century, considered closer to nature and thus retaining an innocence and authenticity lost to modern humanity. Queequeg's mark of the labyrinth signifies that he possesses and embodies a mythic understanding of the world. However we are disabused of the sagacity of Queequeg, as an individual. His tattoos:

> Had been the work of a departed prophet…who, by those hieroglyphic marks had written out on his body a complete theory of the heavens and the earth, and a mystical treatise on the art of attaining truth; so that Queequeg in his

[172] Gregory R. Pritchard, *Econstruction: The Nature/Culture Opposition in Texts about Whales and Whaling*, Thesis, Faculty of Arts, Deakin University, pp.206-207.

> own proper person was a riddle to unfold…but whose mysteries not even he himself could read, though his own live heart beat against them (MD491/2)[173]

Hackworth and Pritchard consider the significance of Queequeg's Cretan labyrinth as a signpost to Melville's evoking the figure of the Minotaur, which they each interpret as figuratively applied to represent humanity's struggle with monstrous nature. Hackworth first applies this concept to Queequeg's impact on Ishmael, who overcomes his fear of the savage and questions Ahab's logic as part of an internal struggle for his own identity and perspective on the self and our relationship with the world. She later identifies the whale as Minotaur, standing for nature and Ahab's monomania in seeking dominion over the sea through the whale's destruction. Both Queequeg and the whale function as synonymous with the Cretan minotaur, as enemies or antithetical representatives of the monstrous to nineteenth-century culture.

The text thus brings together the old and the new, the spiritual and savage and the scientific and rational, and it challenges reading these as completely separate and incompatible. It may represent Melville's own uncertainty over where knowledge lies and definition of authenticity in respect of nature. Pritchard finds Melville within *Moby Dick* questioning both science and religion[174] and utilising mythic qualities while at the same time leaning towards the depiction of nature as indifferent to the survival of humanity. This indifference leads Pritchard to suggest that Melville anticipates ecocriticism, while in bringing the mythic and scientific together he poses what

[173] Pritchard, p.214.
[174] Pritchard, p.257.

remains as the unanswered 'major question of *Moby Dick*, whether or not there is anything behind the world of phenomena.'[175]

To extend discussion, if the whale takes the place of the minotaur then the sea becomes the labyrinth, the environment which sustains both human and non-human life. The sea serves as a point of separation from tamed nature, and human order, on land. It directs the labyrinthine journey through the turning of its tides. While for many the journey appears confusing and meaningless, for the hero it can lead to enlightenment and humility. Melville repeatedly utilises labyrinthine imagery in the spirals and whirlpools of the sea, and in the ropes that provide a coiled thread to protect the lives of sailors. Structurally too, a labyrinthine aesthetic emerges. Pritchard writes of 'chapters that counter and contradict each other, (which) complicates interpretation and gives the book its rhythmic feel.'[176] Contradiction goes further however as chapters in *Moby Dick* oscillate between mythical, fictional and scientific commentary on whales. Chapters also alternate between the fictional narrative, scientific accounts of whales and the perspectives of the rival heroic figures of Ahab, would-be conqueror of nature, and his reluctant confederate, the questioning anti-hero Ishmael. For Ahab the domination of nature ultimately leads to self-destruction, while Ishmael and Moby Dick alone survive.

The whale differs from the minotaur in being real and natural as opposed to unnatural and monstrous, a point lost on Ahab. Ahab's view of the whale as hostile and vindictive rather than indifferent demonises and identifies it as a threat. For Pritchard, Moby Dick stands for nature with the whale's survival symbolic of the

[175] Pritchard, p.334.
[176] Pritchard, p.280.

futility of humanity's attempted conquest of the natural world. The consequence of identifying the whale with nature would be to identify Ahab's obsession as a monstrous, unnatural malice spawned by a warped view of nature. Might Ahab himself provide a more fitting image of the Minotaur? Physically Ahab presents the hybrid figure of half man- half whale with his 'barbaric white leg upon which he partly stood…fashioned from the polished bone of the sperm whale's jaw.'[177]

Pritchard's reading reflects the significance the whale had come to acquire to symbolize nature. In the twentieth century the whale has become a totem for the existential threat to the sublime natural world. A little over a century after Melville's novel the whale began to feature as symbolic of endangered species per se as the full effects of the Anthropocene were felt. In identifying the whale as minotaur Pritchard suggests an inverse outcome as Ahab not the monstrous creature within the labyrinth perishes. As a result the secrets of the labyrinth itself remain hidden. The struggle between Ahab and the whale provides a valuable reflection of human hostility toward and ignorance of the non-human. Hackworth locates Melville as a proto-environmentalist through *Moby Dick's* cultivation of respect for nature as opposed to perceiving it as a force to subdue.[178] However a concentration on minotaurian conflict obscures broader ecological questions. If Ahab had triumphed over the whale this would not necessarily have compromised the structure of the environmental labyrinth within which the conflict was set.

[177] Herman Melville, *Moby-dick: Or, the Whale* (London:Penguin Books, 2003), p. 135.
[178] Hackworth, p.217.

It would seem that *Moby Dick* asks questions of authenticity, human fallibility and respect for nature rather metaphorically focusing on an existential ecological threat. Pritchard acknowledges Melville's uncertainty, caught between a spiritual appreciation of the natural world and a scientific one, in *Moby Dick's* criticism of both religion and science. Melville's questioning of the metaphorical ecological path evokes labyrinthine confusion and complexity. Ultimately the debate between cyclical and evolutionary structure would await the publication a few years later of Darwin's seminal text *The Origin of the Species*.

In *Moby Dick* the labyrinthine sea may hold the secret at its ineffable centre; the whirlpool at its heart the home of the whale and the site of the final conflict between Ahab and Moby Dick. Following Ahab's destruction the book echoes Edenic harmony between the species as Ishmael remains unharmed in order it would seem that he acts as a witness. Ishmael emerges as the quest hero of the labyrinthine sea journey. His experience comprises a reflective and didactic rite of passage, in which he is exposed to labyrinthine clues and from which he returns transformed. Yet Ishmael's return to tell the story merely raises rather than answers questions of authenticity, reflecting contemporary nineteenth-century culture.

Moby Dick partially comprises a proto, internal, eco-labyrinthine dialogue at a time of uncertainty. Since the nineteenth century the balance in Western culture between religious/spiritual and secular/scientific has increasingly tilted toward the latter. Correspondingly human impact on environment and ecology has magnified due to humanity's increasing capacity to push the boundaries of possibility. The ambiguity and contingency of Melville's position in *Moby Dick* has given way to polemical

oppositions. The self-confident certainty of science and human primacy as a demonstration of evolutionary theory has supplanted religious mythology, likewise the definition of the labyrinth as a single circuit has given way in popular usage to the multicursal complexity of the maze.

In the twentieth century the Argentinian author Jorge Luis Borges became the most famous exponent of the literary labyrinth. Borges consciously utilised the labyrinth in a series of short stories, as an esoteric scheme which emerges in the course of the narrative. Borges' uses the term labyrinth interchangeably for unicursal and multicursal structures. The Borgean labyrinth typically appears as subsidiary to the immediate, conscious quest, emerging as the underlying force guiding its denouement. The narrative voice in Borges' fiction often takes the role of detective, piecing together evidence leading to the discovery of the illuminating labyrinth. In *The Garden of Forking Paths* Borges' labyrinth provides the unifying structure within which a myriad of 'various possible futures' take place simultaneously in time in parallel to each other.[179]

In *Tlon, Uqbar, Orbis Tertius* Borges looks at the construction of a maze of false consciousness and notions of authenticity. Across time a succession of individuals forge artefacts supporting the existence of another, superior, world: 'Orbis Tertius'. The evidence becomes so widespread that it begins to be taught as fact within schools. It overwhelms and replaces the world of authentic experience. Borges describes this maze as having 'disintegrated (the real) world. Enchanted by its rigour, humanity forgets over and again that it is a rigour of chess masters, not of

[179] Jorge Luis Borges, *Labyrinths: Selected Stories and Other Writings*, ed by Donald A .Yates and James E.Irby (London: Penguin Classics,2000), p. 53.

angels.'[180] This facsimile of the world fulfils the aim of its financier, 'the ascetic millionaire Ezra Buckley' who sets 'one condition: 'The work will make no pact with the imposter Jesus Christ.' Buckley did not believe in God, but he wanted to demonstrate to this non-existent God that mortal man was capable of conceiving a world'.[181] A similar theme appears in *His Dark Materials* where multiple worlds undermine the legitimacy of a creator God, and also features an artefact literally forged to provide access between worlds in a subtle knife, wielded by the philosophers' guild.[182]

The recurring power of literature and myth over the human mind emerges in Borges' *Theme of the Traitor and the Hero*. Borges ponders the existence of 'parallelisms'[183] and the power of the idea of history repeating itself in a cycle that produces meaning. The recurring use of the labyrinth by Borges suggests that it represents the nature of reality. Within these stories perceptions of the labyrinth structure emerge and directly impacts upon the world. Borges uses the symbol mythologically to structure and imbue meaning into his fictive worlds.

The labyrinth dichotomy, as the structure of nature, features obliquely in Umberto Eco's *The Name of the Rose*, in which the labyrinth appears as a central symbol. Set in a monastery during the Middle Ages a library constructed as a labyrinth holds the secret behind a series of murders. The plot draws the protagonist and his assistant to the labyrinthine library which frustrates attempts to gain access to illicit knowledge. Only the blind librarian holds the secret to traversing the labyrinth and locating books

[180] Borges, p.42.
[181] Borges, p.40.
[182] Philip Pullman, *The Subtle Knife* (London: Scholastic Ltd, 2001), p.141.
[183] Borges, p.103.

within it. The centrality of the labyrinth in *The Name of the Rose* transcends the protagonist's attempt to identify a murderer by shining a light on the ignorance and fear of knowledge behind the crime. The labyrinthine monastery library serves as the repository of knowledge and alternative ideas some of which are perceived as undermining Church orthodoxy. The murderer who seeks to prevent access to illicit knowledge is a blind librarian monk who symbolically eats the pages of the suspect book, inverting Adam and Eve's consumption of the fruit of the tree of knowledge.

Helmut Jaskolski finds the labyrinthine library in Umberto Eco's *The Name of the Rose* as a potent expression of physical structure pregnant with deeper meaning.[184] The labyrinth features in various guises as a physical, intellectual and cosmological construct. Penetrating the library labyrinth and discovering the truth leads Eco's super sleuth William of Baskerville to a metaphorical epiphany; 'I behaved stubbornly, pursuing a semblance of order, when I should have known well that there is no order in the universe.'[185] This revelation reinforces the impression of Baskerville as a man ahead of his time, highlighting the tension between a religious view of the cosmos and the scientific rationality he applies as detective. In doing so Eco also appears to determine the meaning of the text and thus provide interpretive closure.

These few examples point to the potential of the labyrinth in the Anthropocene to insert a symbolic understanding of order within a text, as a way of reading the text for its ecological structure. A labyrinthine reading does not seek to wrest control from the author, but rather to convert their text into a structural model that reflects their

[184] Jaskolski, pp.123-132.
[185] Umberto Eco, *The Name of the Rose,* trans by. William Weaver (London:Book Club Associates, 1984), p.,492

ecological and religious predispositions. Tzvetan Todorov suggests that individual texts form relationships with universal laws as 'merely one of its possible realizations' but a gateway nonetheless to the 'understanding of… structure … the real goal of the structural analysis.'[186]

In extending labyrinthicity into an explicitly 'eco-labyrinthine' model I focus upon the interpretation of the labyrinth as a metaphor for ecology. In putting two alternative labyrinthine texts together we can begin to reconcile them and see their inconsistencies as part of a continuum, a scale, and identify inconsistencies, weaknesses and reinterpret ecological currency accordingly. What follows entails exploring the tension between the respective predominance accorded the unicursal labyrinthine (*Rings*) versus multicursal maze (*Materials*) dichotomy and its' potential to produce a revised reading of each text's ecological content. This approach appraises text through its reflection of eco-labyrinthine structural principles and the extent to which inconsistency of application subverts and undermines authorial intent, by examining holistic ecological integrity.

[186] Tzvetan Todorov and Arnold Weinstein, 'Structural Analysis of Narrative', *NOVEL: A Forum on Fiction*, 3.1, (Autumn, 1969), 70-76 (p.70).

Chapter Four

What eco-labyrinthicity adds to critical approaches to *Rings* and *Materials*

In this chapter I turn to critical reception of *Rings* and *Materials* especially in relation to the representation of ecology, structure and authenticity, to show how an eco-labyrinthine analysis differs from, or extends previous criticism.

While numerous examinations of environmental themes appear in journal articles and in wider studies of Tolkien's work, ecocritical analysis of Tolkien's Middle-earth cosmology centres on four extended studies: Patrick Curry's *Defending Middle-earth: Tolkien, Myth and Modernity* (1997, repub 2004); Matthew Dickerson and Jonathan Evans' *Ents, Elves and Eriador* (2006); Liam Campbell's *The Ecological Augury in the Works of J.R.R. Tolkien* (2011); *Susan Jeffers' Arda Inhabited – Environmental Relationships in The Lord of the Rings* (2014).

Each of these ecocritical studies make broad claims about Tolkien's ecocritical integrity. While they all essentially agree with Dickerson and Evans' contention that "it has been rightly said that the true hero of *The Lord of the Rings* is not Aragorn or Sam Gamgee or even Frodo but Middle-earth itself"[187] each ultimately falls short of providing an earth-centred, as opposed to a character focused, analysis that eco-labyrinthicity offers.

[187] Matthew Dickerson and Jonathan Evans, *Ents, Elves, and Eriador: The Environmental Vision of J.R.R. Tolkien* (Lexington: The University Press of Kentucky, 2006), p. 269.

In the first of these studies Curry chooses to examine Middle-earth's green credentials solely through the lens of *Rings,* as the 'priority is Tolkien's meaning and impact in the contemporary world…that stems almost entirely from *The Lord of the Rings.'* [188] Curry defines his critique as a postmodern reading, justifying the validity of his personal interpretations and inflections; 'meanings are always open, in principle to reinterpretation along new and different lines, including ones unsuspected by the author…. contents of books cannot be separated from the sense that particular readers make of them.'[189] As a Canadian inclined toward Buddhism, Curry largely neglects the Christian significance of *Rings*, finding Tolkien's Christianity reflected solely in examples of 'humility and compassion' where 'rising above the dogmas of his own religious upbringing, Tolkien has thus made it possible for his readers to unselfconsciously combine Christian ethics and a neo-pagan reverence for nature.'[190] As a result the book only marginally engages with debates about Christian perspectives on authenticity and consequently does not connect *Rings* with Christian mythic tradition. Critical reception of *Defending Middle-earth* included the charge that the text serves as a vehicle for Curry to expound upon his own ecological opinions. Michael Drout and Hilary Wynne describe the book as 'more about using Tolkien's works as an excuse to talk "Green" politics than it is an investigation of Tolkien's writing.'[191]

[188] Patrick Curry, *Defending Middle-earth: Tolkien: Myth and Modernity* (London: Harper Collins, 1998), p. 16.
[189] Curry, p.21.
[190] Curry, p.29.
[191] Michael D.C. Drout and Hilary Wynne, 'Tom Shippey's J.R.R Tolkien: Author of the Century and a Look Back at Tolkien Criticism since 1982', *Envoi*, 9.2 (2000), 101-167 (p. 114).

Setting aside these reservations, in *Defending Middle earth* the spiritual does feature as integral to an overarching ecological architecture of *Rings*. Curry identifies 'three domains, each one nestling within a larger: the social ('the Shire'), the natural ('Middle-earth'), and the spiritual ('the Sea')' that he cross-references to 'Tolkien's own remark in his superb essay on the subject, that 'fairy stories as a whole have three faces: the Mystical towards the supernatural; the magical towards Nature; and the Mirror of scorn and pity towards Man.'[192]

While Curry identifies the spiritual sphere as 'the most encompassing of all: an ethics rooted, so to speak, in spiritual values as symbolized by the Sea'[193] the sea itself remains a distant and portentous presence in *Rings*, appearing in dreams and as a portent of departure from Middle-earth. As discussion of *Moby Dick* in the previous chapter illustrates, the sea as untamed, authentically wild and alive can speak for the eternal power of nature and the diminution of mortal beings. However, the centrality of the sea to the direction of the text as fulfilment of an ecological teleology appears unconvincing, and Curry goes on to extend the spiritual to encompass the stars thus identifying it more broadly with immutable markers of a structured universe.

Defending Middle earth is not alone in uncritically accepting the elves as representing ecological wisdom and lives spent in tune with nature. The eulogizing of the elves accepts their ecological virtue as axiomatic and elevates them beyond the status of the sympathetic and sublime figures they undoubtedly are meant to be. By contrast an eco-labyrinthine reading identifies an ecological and cosmological structural model against which to assess ecological merit. The validity of the elves as

[192] Curry, p.27.
[193] Curry, p.28.

ecological exemplars for Middle-earth should proceed from such an analysis of how they align with ecological and cosmological structure, to reflect the core tenet of ecocriticism of applying an earth-centred analysis.

In chapter one I refer to Santmire's identification of the dyadic characteristics of Christian theological approaches to nature, as a spiritual motif and an ecological motif respectively. Within this dyad the elves might function on the spiritual level in having affinity with God, rather than as realising authentic ecological lives. The elves immortality sets them apart from the mortal world of Middle-earth, while ultimately despite their nobility and wisdom the elves comprise a fallen race called to repent, relinquish control and leave the circuits of the world.

In their ecocritical reading of Tolkien's Middle-earth legendarium, *Ents, Elves and Eriador*, Matthew Dickerson and Jonathan Evans offer a stewardship-centred model focused on the examples of hobbits, elves and ents. They suggest these comprise three complementary stewardship or land management models that collectively inform a healthy and diverse ecosystem. At the same time the authors claim that Middle-earth possesses an innate resilience; 'Tolkien's Middle-earth…has an inherent purpose…and no decision of Elf, Dwarf, Man or Hobbit can diminish its inherent goodness or change the purpose for which it was made.'[194] Such a statement might draw some legitimacy from the ubiquity of prophecy that suggests that Middle-earth ultimately adheres to a model that assures its sustainability. However in so doing it undermines the sense of ecological threat, of the effect of freewill, and the impact of any one species on overall ecology, which brings into

[194] Dickerson and Evans, p.30.

question just what the inherent purpose, or the immanent ecological structure comprises. The focus on the ecological currency of different stewardship models might therefore have benefited from a preliminary identification of the overall ecological structural orientation of Middle-earth against which to anchor stewardship.

Dickerson and Evans' application of a stewardship model to *Rings* provides a link to Christian Fall mythology and the exercise of divinely ordained dominion over the earth. The aligning of dominion with stewardship confers a responsibility that retains an anthropocentric ethos. Furthermore stewarding can only be enacted and its' success assessed in relation to a clear understanding of what ecological integrity comprises. As a spiritual approach that offers a measure of redemption to Christianity, Richard Bauckham has criticised Christian stewardship models for maintaining human hubris, and for its inference that stewardship indicates an absence of God.[195] The implication of the idea would suggest that ecological disorder would follow from the absence of human stewardship, a suggestion refuted by the existence of eco-systems independent of human interference and of an overall ecology threatened primarily by the activity of human-beings. The identification in Genesis of human fallibility refutes human hubris in belief it can fully understand ecology in order to maintain balance and equanimity. The task of stewarding the earth reinforces the fundamental problem in the Anthropocene of humans taking charge of the earth. The over-estimation of power allied to the wielding of technological resources that Bauckham identifies as a component in stewardship[196] runs completely contrary to the ethos of *Rings*, where wise characters

[195] Richard Bauckham, *Bible and Ecology: Rediscovering the Community of Creation* (London: Darton, Longman and Todd Ltd, 2016), p.7.
[196] Bauckham, p.4.

do not dare to attempt to seek mastery over Middle-earth by using the eponymous ring of power. The use of technology would in Tolkien's view lead to humans becoming servants of machines.

While *Eriador* suggests that authenticity appears in faerie form, the stewardship models of hobbits (agriculture), elves (horticulture) and ents (feraculture) are applicable ecological exemplars in so far as they stand as human proxies in a hierarchical system. Dickerson and Evans' reading may invoke Aldo Leopold's 'Land Ethic' which interprets 'our interaction with the nonhuman world as "right when it tends to preserve the integrity, stability, and beauty of the biotic community" and "wrong when it tends otherwise",[197] however it neglects to explore sufficiently the imaginative, mythological and spiritual aspects of a holistic ecology that form part of Leopold's Land Ethic where he describes:

> land as an energy circuit.. (1) That land is not merely soil; (2) That the native plants and animals kept the energy circuit open; others may or may not; (3) That man-made changes are of a different order than evolutionary changes, and have effects more comprehensive than is intended or foreseen.[198]

Leopold retains in this definition the necessity of perceiving the earth itself as an active, living participant underlying and directing the land ethic. Stewardship as a means of assuring sustainability otherwise tends towards focusing on the specific

[197] Aldo Leopold, *A Sand County Almanac: and Sketches Here and There* (New York: Oxford University Press, 1968), pp. 224-225.
[198] Leopold, p.218.

needs of the particular steward. In the absence of a clear directive power the same reservations that apply to Curry's ecological elves undermine the validity of Eriador's stewardship model. In Eriador the elves serve as a substitute for the absence of a definitive structural articulation of the bio-divinity of the biosphere. Evans and Dickerson laud the elven stewardship model for 'maintaining biological diversity.'[199] The elves however clearly represent a problem for an ecocritical reading. As George Monbiot recognises 'to keep an ecosystem in a state of arrested development, to preserve it as if it were a jar of pickles, is to protect something which bears little relationship with the natural world.'[200] In his published correspondence Tolkien says something similar about how the elves became embalmers.[201] In this light the authors' claim that 'the sense of failure that accompanies the elves' passing should not be attributed to flaws inherent in their environmental aesthetic'[202] appears misplaced.

Dickerson and Evans suggest that hobbit land stewardship focuses on 'cultivation and conservation of the soil.'[203] Hobbit farming methods produce a patchwork of fields balanced with woodland, which represent what Tolkien regards as an English idyll. The pastoral can however mislead by misrepresenting agrarian landscapes as themselves representing an undeveloped, natural landscape. A narrow focus on soil as commodity or agrarian resource reinforces negative impressions of undeveloped place as space to be occupied. In addition when Dickerson and Evans praise the hobbits for eschewing the use of pesticides there is no supporting evidence to

[199] Dickerson and Evans, p.100.
[200] George Monbiot, *Feral: Rewilding the Land, Sea and Human Life* (London: Penguin Books, 2013), p. 9.
[201] Tolkien, *Letters*, p.151.
[202] Dickerson and Evans, p.114.
[203] Dickerson and Evans, p.95.

suggest that such measures are available in the Third Age of Middle-earth. When innovative methods do appear some hobbits embrace what they see as 'progress' in the conversion of Sandyman's Mill to a polluting factory. This highlights the weakness of a character based ecocriticism which firstly identifies groups as predominantly virtuous and then looks for wider ecological reflections.

The application of a stewardship model raises questions about the authors' analysis of the ents. If ents care for wilderness 'by letting plants, flowers, and trees grow according to the principles inherent in their nature, countenancing neither the conversion of these lands to civilised use nor the organized cultivation of growing things'[204] then what do they actually do as 'stewards'? A question must be raised over how and why the ents allow ecological destruction to proceed for so long if considered exemplary stewards.

Liam Campbell's *The Ecological Augury in the Works of J.R.R. Tolkien* ranges across the spectrum of Tolkien's Middle-earth literature. Campbell objects to Dickerson and Evans' stewardship model on the grounds that environmental relationships in *Rings* are more 'profound.'[205] Campbell's difficulty lies in how to clearly define the profundity of *Rings'* ecological cosmology. He writes that 'Tolkien manages to create a secondary world that radiates with a sense of all pervading spirituality'[206] but finds this largely intangible; 'In the main… this sense of a

[204] Dickerson and Evans, p.123.
[205] Liam Campbell, *The Ecological Augury in the Works of JRR Tolkien* (Zurich: Walking Tree Publishers, 2011), p. 63.
[206] Campbell, p.181.

perceptible ambience is seemingly without source'[207] albeit it demonstrates 'an understanding that humanity was part of the interconnected wonder of creation.'[208]

Campbell acknowledges that Tolkien's non-instrumental perspective of nature is consonant with the emergence of the deep ecology branch of ecocriticism[209] and later notes that evil is far more readily encountered through landscape than directly through harm done to individuals through evil acts.[210] Nevertheless Campbell ultimately rejects a deep ecology reading, writing ''it would be obtuse (and a blatant disregard of his Christian values) to deem Tolkien to be a deep ecologist (for one thing Deep Ecology advocates active measures which may reduce the human population).'[211]

Campbell struggles with the paradox of Tolkien's Christian values and the legendarium's apparently pagan flavour. In the absence of identifying a structure that blends Christian with pre-Christian symbolism to represent perspectives on ecology he looks for character-based ecological meaning in the elves. Campbell suggests elves articulate 'devotion to nature (which) paints the narrative with a decidedly non- or pre-Christian hue.' [212] Consequently he contends that 'Tolkien had a blueprint for the presentation of a 'pagan' ecocentric secondary world that could reflect Christian belief – Celtic mythology.'[213] The suggested Celtic link contradicts Tolkien's comments about mythology in his correspondence, which expresses an ambition to

[207] Campbell, p.182.
[208] Campbell, p.63.
[209] Campbell, p.35
[210] Campbell, p.220.
[211] Campbell, p.35.
[212] Campbell, p.177.
[213] Campbell, p.177.

compose a myth for England that would be qualitatively different to Celtic mythology.[214] When Campbell writes that elves 'wish to secure no dominion over nature or over Middle-earth' [215] he does so without having first defined the structure of nature within which to make such a claim. The assertion also runs counter to the elves use of illicit power to establish enclaves governed by them and qualitatively different from the rest of Middle-earth, which reprises themes in the myth of the Fall.

Alone of the book length ecocritical studies of Tolkien, Susan Jeffers' *Arda Inhabited– Environmental Relationships in The Lord of the Rings* offers a structural model for exploring *Rings*. It does so by using an abstract model as a philosophical way of illustrating ecology. Jeffers asserts that:

> Ecocriticism's focus on interconnectedness is a helpful addition to critical theory. However, ecocriticism itself would be improved by an expansion of what connections it looks at…If ecocriticism is already observing points of connection between elements of the material world, it is not an incredible leap to include points of connection between the material and the transcendental. This connection is certainly applicable to an understanding of environment in Tolkien's work. For Tolkien, connection with the material world reflects a connection with the transcendental, The two are intertwined.[216]

[214] Tolkien, *Letters*, p.144.
[215] Campbell, p.187.
[216] Susan Jeffers, *Arda Inhabited: Environmental Relationships in The Lord of the Rings* (Ohio: The Kent State University Press, 2014), p. 16.

Jeffers applies Gilles Deleuze and Felix Guattari's non-hierarchical rhizome model to her reading of Tolkien's Middle-earth. As a botanical metaphor the rhizome model constitutes a lateral, irregular, unpredictable series of branches and connections that Deleuze and Guattari offered in opposition to the organising biological metaphor of the tree.[217] The rhizome undermines ideas of fixed structure in much the same way as the maze, but without the tension between alternative conceptions of ecology; 'Unlike a structure, which is defined by …binary relations between the positions, the rhizome is made only of lines...multiple entryways and exits.'[218] The rhizome was intended as a non-hierarchical rejection of the vertical tree, inspired by the Marxist and atheistic orientation of its authors. The implicit rejection of the metaphor of the tree in the rhizome model appears incongruous with Tolkien's environmental sympathies, which repeatedly invokes the tree as the most pronounced signifier of nature.

Jeffers' proposed transcendent structure at least provides a marker against which to chart ecological action. Jeffers appraises groups through their proximity to the rhizome model. She suggests that this chimes with the tenor of Tolkien's writing in which 'hierarchies involving inter-species domination are either undone or a mark of evil'[219] thus implicitly reflecting a link between ecological structure and authentic ecological behaviour. Jeffers charts three different relationships whereby, 'Ents, Hobbits and Elves all work toward having "power with" their surroundings. Men and

[217] Lyn Robinson and Mike McGuire, The rhizome and the tree:changing metaphors for information organisation, *Journal of Documentation* (2010) , Vol.66, No.4, pp.604-613, p.605.
[218] Giles Deleuze and Felix Guattari, *A Thousand Plateaus:Capitalism and Schizophrenia,* trans by B.Massumi (Minneapolis: University of Minnesota Press, 1987), p.21.
[219] Jeffers, p.8.

Dwarves all gain “power from” their environments. Orcs, Sauron, Saruman, and their cohorts all attempt to have “power over” their world.’[220] The focus on power relationships with the environment however suggests the disempowerment and passivity of ecological structure.

Jeffers’ methodology leads to her joining the chorus extolling elven ecological credentials. She sees them as ‘possessed of three overarching qualities. First, they love Middle-earth. Secondly, they are wholly “good” within the moral framework of the book. Lastly, they are most comfortable with a state of positive stasis –they want to “preserve all things unstained.”[221] This reading of elven moral perfection rests upon shaky ground when considered in terms of the legendarium as a whole. In *The Hobbit* we especially find elves depicted as petty and prejudiced against dwarves. In *Rings* the elves actions are framed by their earlier fall; in using rings of power to withdraw into ecologically inauthentic strongholds that solely protect their own race from the depredations taking place across Middle-earth. The extent to which the elves and hobbits ‘share power’ with nature, as Jeffers’ suggests, to illustrate sustainability also appears questionable. *Rings* closes with the elves departure from Middle-earth leaving elven enclaves to return to nature. Hobbits undergo a renaissance, yet one that will surely reprise and exacerbate environmental issues the text raises over the impact of population growth on the adjacent Old Forest. Inconsistency of application identifies the Rohirrim within a ‘power over’ nature relationship based on their primary identity as horse-lords. Yet there is a symbiotic relationship between horse and human each of which lives a life guided by nature’s

[220] Jeffers, p.19.
[221] Jeffers, p.39.

cycles and seasons. A sense of voluntarism also exists as Shadowfax the greatest of Rohan's horses chooses who will ride him.

One aspect that Jeffers identifies with creating meaning in *Rings* is the quest as a journey toward enlightenment. She acknowledges 'a spiritual or metaphysical element to travelling…including…in regard to the environment' where 'The different types of journeys reveal the spiritual change these characters experience in conjunction with their physical movements.'[222] As a result she concurs that 'the physical (and)…spiritual environment…are connected and the observance of that connection can be an aid to environmental approaches to literature as well as Tolkien studies.'[223] Jeffers' in particular identifies the journeys of Frodo and Gandalf as a pilgrimage.

While Jeffers' acknowledges the journey as a vehicle for spiritual change through encounters with the environment, Ursula Le Guinn notes the presence of a rhythmic pattern in *Rings*; 'two beats. Stress, release. Inbreath, outbreath. A heartbeat. A walking gait. But on so vast a scale …that it carries the whole enormous narrative ..from beginning to end, from There to Back Again.'[224] If the effect imbues the structure of the text with a life of its own, then the frequent turns, repetitions, and progress toward a goal, I would suggest frame this within an eco-labyrinthine model. Le Guinn suggests that an important element in the experience of reading *Rings* rests on reader perceptions of accompanying the hobbit protagonists; 'The fact is,

[222] Jeffers, p.117.
[223] Jeffers, p.118.
[224] Ursula K., Le Guinn, 'Rhythmic Pattern in The Lord of the Rings', in *Meditations on Middle Earth: a collection of essays on Tolkien*, ed. by Karen Haber (London: Simon & Schuster UK Ltd, 2003), (101-116) p. 105.

we walk…with Frodo and Sam…all the way.. And back'[225] and thus vicariously experience the same pilgrimage. Le Guinn illustrates her approach within a single chapter, 'Fog on the Barrow Downs', which will figure in Chapter Five as a fundamental expression of eco-labyrinthicity. For Le Guinn the chapter identifies how the barrow-wight appears as an anticipation of Sauron with 'the chapter (as) one beat in the immense rhythm…relating all the parts of the book by repeating or suggesting parts of the pattern of the whole.'[226] She concludes that 'I think it is a mistake to think of a story as simply moving forward. The rhythmic structure of narrative is both journey like and architectural.'[227]

Bernard Hirsch has also written of *Rings* as echoing the musical scheme of *ritardando, diminuendo,* and *coda.* Hirsch perceives dissonance giving way to a diminution from the mythic toward the prosaic in the recapitulation of the plot in The Shire. Hirsch argues that the continuation of the narrative after the ring's destruction reveals the transcendence of structure from the mythic plane to the everyday. He notes that while Tolkien devotes more pages to the outbound, necessarily circuitous quest, he retains the same temporal parameters for the duration of the return journey. Hirsch describes this as 'perfect symmetry (through which) Tolkien actually emphasized the significance of the seasonal cycle.'[228] As a result he writes 'The quest structure is thus not circular but helical: it winds in a spatial and seasonal circle and yet progresses forward to reach a new and richer dimension.'[229] While the labyrinth encompasses the same principles in a Christian and spiritual form, Hirsch

[225] Le Guinn, p.105.
[226] Le Guinn, p.116.
[227] Le Guinn, p.116.
[228] Bernhard Hirsch, 'After the "end of all things": The Long Return Home to the Shire', *Tolkien Studies*, 11 (2014), 77-107 (p. 79).
[229] Hirsch, p.79.

asserts that the dawning of the fourth age leads 'toward the larger farewell to a whole era: there is no place for the mythic world in the age of men.'[230] If correct the conclusion would disenchant the world in conflict with Tolkien's views. The continuation of structure in the recapitulation of theme rather suggests the iterative cycle transplanted from the mythic plane to the prosaic world inherited by humanity. In this the diminution reveals a connection to the Fall, and its themes of structural relationships, freewill, heroism and environmental consequences. The musical allusions Le Guinn and Hirsch perceive in *Rings* are consistent with Tolkien's wider cosmology in *The Silmarillion*, wherein the creative power creates the universe through musical composition. The imperfection of creation proceeds from discordant notes interjected by a rival, malignant power seeking to exert their own influence.

The eco-labyrinth concept corresponds with aspects of Micheal Brisbois' analysis of how in *Rings* 'the underlying cosmology of Christianity affects the events… the medieval understanding of nature… as the result of providential design and control was an essential tenet.'[231] Brisbois argues that Tolkien presents nature through a dyad between ambient and active forms. The former enchant nature, for example by allowing characters to divine meaning from the colour of the sky. The latter especially as 'wrathful nature'[232] becomes directly involved in the narrative but remains blind to the quest and therefore independent. By contrast the eco-labyrinth, itself comprising a medieval Christian conception of nature, locates meaning through structure, as a series of cycles embodied in natural places, which the following chapter will suggest play an active part in the quest. Such an overarching

[230] Hirsch, p.102.
[231] Michael J Brisbois, 'Tolkien's Imaginary Nature: An Analysis of the Structure of Middle-earth', *Tolkien Studies*, 2 (2005), 197-216 (p. 202).
[232] Brisbois, p.211.

cosmological labyrinthine structure chimes with Kristine Larsen's identification of the significance of stars in *Rings* as markers of mythological events.[233] The fixed courses of the stars alignment with events of Middle-earth infer a teleology at play and an holistic design.

Tom Shippey suggests that structure aids the effectiveness of *Rings*, and suggests this might reflect the medieval textual art of 'interlacing' where individual journeys proliferate and at times coincide.[234] Shippey illustrates this through the revolving accounts of attendees at the Council of Elrond. He observes that 'Not much has been said by critics about the structure of *The Lord of the Rings*, but it is considerably more complex and at least as carefully-integrated as the multiple narrative of Joseph Conrad.'[235] Shippey identifies the main effect of interlace as the creation of a sense of reality, and of characters blinded to the overall plot who seek to pursue an uncertain course toward salvation. Such uncertainty also features as a central aspect of both labyrinth and maze. Whereas interlace -or *entrelacement*- focuses on the interweaving of various characters journeys, it also reflects on how these diverse destinies combine to create structure and order. The labyrinth/maze dichotomy suggests an additional implicit, hidden ecological structure that reflects the congruence of ecological authenticity and the quest. When applying interlace into an ecological reading of *Rings* Rebecca Merkelbach suggests 'at least seven

[233] Kristine Larsen, 'Myth, Milky Way,and the Mysteries of Tolkien's Morwinyon, Telumendil and Anarrima', *Tolkien Studies*, 7 (2010), 197-210 (p. 197).
[234] Tom Shippey, *J.R.R. Tolkien: Author of the Century* (London: Harper Collins, 2000), p. 103.
[235] Shippey, *Author*, p.107.

narrative phases before the destruction of the ring'[236] that each comprise the crossing of a didactic liminal divide leading to transformation. In focusing on character transformation Merkelbach regards the mythological Old Forest as marginal, 'The episode itself is certainly not central to the plot, but in it, the hobbits go into the wild for the first time.'[237]

While Shippey champions interlace and suggests that Tolkien's reading of medieval romance would have exposed him to it he admits that 'The narrative of the great 'interlaced' romances is, however, by no means famous for wisdom.'[238] Interlace does not easily relate to the tension between alternative understandings of ecological structure as cyclical or dynamic. Penelope Reed Doob meanwhile suggests that exposure to medieval writing would be more likely to elicit labyrinthine influence:

> a better model (than interlace) for medieval narrative on purely structural grounds, the labyrinth is also more likely to have been a conscious model…In almost every description of the labyrinth from classical antiquity onward, error is an explicit characteristic of the maze but not necessarily of interlace which has far less extensive a literary history. Moreover, the labyrinth is repeatedly seen as the most illustrious example of sublimely complicated artistry.[239]

[236] Rebecca Merkelbach, 'Deeper and deeper into the wood: forests as places of transformation in The Lord of the Rings', in *Tolkien: The forest and the city*, ed. by Helen Conrad-O'Briain and Gerard Hynes (Dublin: Four Courts Press, 2013), p. 57.
[237] Merkelbach, p.62.
[238] Tom Shippey, *The Road to Middle-earth*, p. 182.
[239] Doob, p.211.

Derek Shank argues that while Tolkien expressed ambivalence to analyses that sought to identify the origins of recycled elements in stories lest they distract and mislead, these reservations would not apply to structure, which illuminates 'by the implied order of the relationships between its constitutive elements. In other words, there is a system of rules according to which the components of a text relate to one another to produce its meaning.'[240]

I will conclude this analysis of Tolkien criticism by considering eco-labyrinthine structure in terms of its potential to incorporate aspects of ecological symbolism and pagan mythology within a Christian framework. The unicursal labyrinth envelops the interior within its folds. Labyrinthine enfolding lends it to examining what Verlyn Flieger describes as Tolkien's attempt 'to harmonize his work's originality and his own imagination with Christian orthodoxy, and to situate his often unorthodox views within the narrower confines of his religion without abandoning either.'[241] Tolkien valued North European mythology and articulated his love of nature through the symbol of the tree. Colin Duriez's claims that this influences Tolkien's particular approach to natural theology. Whereas natural theology ordinarily posits the possibility of knowing God solely through the lens of creation (nature) by applying reason, Duriez sees Tolkien substituting reason with imagination as the means of engaging with nature and God.[242]

[240] Derek Shank, '"The Web of Story": Structuralism in Tolkien's "On Fairy-stories"', *Tolkien Studies*, 10 (2013), 147-165 (p. 147).
[241] Verlyn Flieger, 'But What Did He Really Mean?',*Tolkien Studies*, 11 (2014), 149-166 (p. 163).
[242] Duriez, *Theology*, p.45.

As a metaphor for nature the symbolic tree in Tolkien echoes pre-Christian Northern European mythology. The figure of the tree in Norse mythology appears as Yggdrasill (The World Tree) which represents cosmological structure, while in *Rings* Shelley Saguaro and Deborah Cogan Thacker write of how 'Tolkien … 'deploys' trees for their symbolic value, signifiers when healthy, of hope and regeneration.' [243] Dimitra Fimi tells of how 'Tolkien had always contemplated presenting his mythology via a 'framework'[244] in order to join his stories to Old English mythology, however she charts a change in emphasis from Englishness to a more general north western European locus.[245] The following chapter engages with the symbol of the tree through the assimilation of the Norse World Tree within an overarching Christian eco-labyrinthine structure.

The issues that *Materials* deals with through its revision of the Fall include authenticity and particularly how to define natural relationships with the world around us. Materials utilises rite of passage as a metaphorical coming of age that produces understanding of the world. In the process it challenges Christian monotheism and fixed structure. The text advocates scientific inquiry, validates change, and establishes a teleology of progress. And it does all of these things through the symbolic didacticism of mythology, further underlined as relating to reality by the link to English history.

[243] Shelley Saguaro and Deborah Cogan Thacker, 'Tolkien and Trees', in *J.R.R.Tolkien. New Casebook*, ed. by Peter Hunt (Basingstoke: Palgrave Macmillan, 2013), 138-155 (p. 143).
[244] Dimitra Fimi, *Tolkien, Race and Cultural History: From Faeries to Hobbits* (London: Palgrave MacMillan, 2010), p. 123.
[245] Fimi, *Race*, p.129.

A number of themes discussed by critics of *Materials* combine to link quest heroism and an overarching ecological model. I engage with a selection of critical perspectives to establish areas where an eco-labyrinthine reading can add further colour and explanation of issues that reflect the text's ecological model. The focus of these examples of Pullman criticism encompass; the text as a rite of passage; the nature of God and Fall mythology; science; counter culture; authenticity and innocence; ecological theory.

Sarah K.Cantrell writes of how few scholars initially engaged with *Materials* as ecological discourse.[246] However, she suggests that the ecological consequences of opening passageways between worlds informs the rites of passage of Lyra and Will, which leads them to the maturity to exercise responsibility and self-sacrifice for the greater good. Having established an interconnected series of worlds reflecting various options, Cantrell notes that Pullman's denouement attracted criticism for the ending where restraint re-imposes borders.[247] Fixed boundaries run contrary to the preceding tenor of multiple possibilities and the necessity to explore many avenues in order to accrue knowledge and thus fulfil an evolutionary teleology of progress. An eco-labyrinthine reading helps to account for this paradox through highlighting the underlying tension between fixed and dynamic ecological structure.

Materials develops a sense of the authentic and natural through the potential for change. It deals with change through offering a potential alternative vision of the Fall, which challenges the idea of a divine, fixed order. Bernard Schweizer writes that 'for

[246] Sarah K.Cantrell, Letting Specters In: Environmental Catastrophe and the Limits of Space in Philip Pullman's His Dark Materials, *Childrens Literature Association*, 2014, pp.234-251, p.234.
[247] Cantrell, p.247.

writers such as …Pullman, God no longer denotes a personified figure in need of iconoclastic destruction but rather a system of ideas that is premised upon the acceptance of theism.'[248] In ecological terms the 'system of ideas' begin with the creation mythology that establish the rules that govern nature and humanity's position and role within this. *Materials* refers to God as 'The Authority' to identify the quest as a counter-cultural rejection of illegitimate power. The multiplicity of other worlds reflects the rejection of a single author of creation employing a fixed set of rules. Kathleen Kellett interprets *Materials* through Mikhail Bakhtin's conception of heteroglossia as a language for "conceptualizing the world in words, specific world views, each characterized by its own objects, meanings and values" (which) can co-exist in a single narrative.'[249] Kellett notes that in *Materials* God represents a hierarchical structure of rigid control against which Lyra, as the new Eve, stands for transgression. Kellett suggests that Dust (the enervated particles that sustains all sentient life across the multiverse) forms a unifying factor as an 'all-encompassing explanation of truth'[250] because it facilitates thought that can lead in different directions. At the same time however Pullman retains the singular view of truth and authority by allowing his quest hero access to the alethiometer; a truth compass that she alone can interpret through an innate ability that legitimises her status as hero. The rival world views that Pullman's God and his hero Lyra represent reflect polemical views that relate to the ecological dyad between balance and dynamism. In eliminating God, *Materials* confirms the ethos of dynamism and evolution, yet the

[248] Bernard Schweizer, '"And He's A-Going to Destroy Him": Religious Subversion in Pullman's His Dark Materials', in *His Dark Materials Illuminated*, ed. by Millicent Lenz and Carole Scott, pp. 160-173 (p. 169).
[249] Kathleen Kellett, Beyond the Collapse of Meaning: Narrative of Monstrosity in Philip Pullman's His Dark Materials, *University of Toronto Quarterly*, Vol 87, No.1 Winter 2018, 158-175, p.160.
[250] Kellett, p.161.

text ultimately still struggles with fully assimilating and accommodating this model in its ending.

An eco-labyrinthine continuum through which to understand the representation of ecology accounts for the presence of two apparently incompatible and yet inextricably linked ideas of nature. It exposes the difficulty of the author in imposing a single model and identifies the inconsistencies that test the viability of polemic. As a scientist first and science fiction writer second Robert Metzger notes that 'Scientists also operate under a set of beliefs'[251] and 'That is the exact mindset that Pullman operates under when constructing his fictional worlds. He has the belief of a scientist, looking for a unifying principle.'[252]

Scientists typically devise experiments to prove a hypothesis. Metzger likens Pullman's compositional method to work in a laboratory 'Like any good scientist Pullman needs to run a few experiments…the right questions, the answers to which will allow him to build a self-consistent, rational world.'[253] If we extend Metzger's metaphor then Lyra and Will feature as the experimental subjects of Pullman's hypothesis. We begin to see them as ersatz laboratory rats whose trials demonstrate intelligence and aptitude by negotiating a maze that 'proves' the existence and nature of dark matter and humanity's principal role in the scheme of the cosmos. Such a reading offers to explain Michael Chabon's emotional feeling that 'by the end

[251] Robert A. Metzger, 'Philip Pullman, Research Scientist ', in *Navigating the Golden Compass*, ed. by Glenn Yeffeth, 49-59 (p. 54)
[252] Metzger, p.55.
[253] Metzger, p.53.

of *His Dark Materials* one can't help feeling that Will and Lyra…have been sacrificed to fulfil the hidden purposes of their creator.'[254]

Daniel P. Moloney criticises Pullman for proselytising on behalf of science by having characters provide authoritative statements of scientific or theological fact.[255] Sarah Zettel, who otherwise admires Pullman for his innovative approach, ultimately concludes that 'for all his attempts to break down trope, archetype and cliché, Pullman's ambitious work falls to the greatest and the worst of them: the need to serve his own message no matter what…and there's nothing left but polemic.' [256]

The revision of Fall mythology challenges Christian influence over Western culture, attributed as a cause of anthropocentrism, which has led to the crises of the Anthropocene. The extent to which *Materials* comprises a counter cultural alternative has exercised the minds of critics. Schweizer concludes that 'Pullman's message is also powerfully liberating and positive. What he places in the void created by his iconoclasm are important values that define modern liberal societies.'[257] Anne-Marie Bird regards *Materials* as 'Pullman's attempt to construct an alternative theological vision that is particularly attuned to the secular humanistic climate of the twenty-first century.'[258] The notion of a progressive teleology of evolution might lead to the

[254] Michael Chabon, 'Dust and Daemons ' in *Navigating the Golden Compass*, ed. by Glenn Yeffeth, 1-14 (p. 12).
[255] Daniel P. Moloney, 'Show Me, Don't Tell Me: Pullman's Imperfectly Christian Story (and How He Lost His Way)', in *Navigating the Golden Compass*, ed. by Glenn Yeffeth, 171-185.
[256] Sarah Zettel, Dust to Dust: the Destruction of Fantasy Trope and Archetype in His Dark Materials, in *Navigating the Golden Compass*, ed. by Glenn Yeffeth, p. 47.
[257] Schweizer, p.169.
[258] Anne-Marie Bird, Circumventing the Grand Narrative: Dust as an Alternative Theological Vision in Pullman's *His Dark Materials*, in *His Dark Materials Illuminated:*

understanding of Will as a character from the secular present who has a civilising effect on Lyra from the preceding century. In each of these analyses Pullman's revision legitimises modern secular culture and the idea the earth has the capacity to sustain continued human progress, which might locate Pullman not as counter-cultural but as a profoundly establishment figure.

The verisimilitude between fantasy and the real world invests *Materials* with a tincture of authenticity. As an English vision of the past the maze metaphor helps us to identify how we arrived at the path that we are currently on and to question what lay behind the decision-making process that arrived at the present. Pullman's faith in science and technological solutions to ecological problems, caused by progress, finds expression in his maze of worlds that connect the prosaic twentieth-century Oxford with an alternative steampunk fantasy version of England from the previous century. Steven Barfield and Martyn Colebrook recognise the connection between Lyra's nineteenth-century England, as a pivotal point in the stages of human development, and Will's contemporary England as the point of reference for how we see all the other worlds in Pullman's multiverse.[259]

Michael Chabon and Kim Dolgin each see multiplicity as integral in the journey from innocence to experience. The former writes that 'the proliferation of points of view

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Critical Essays on Philip Pullman's Trilogy, ed. by Millicent Lenz and Carole Scott (Detroit: Wayne State University Press, 2005), p.189.

[259] Steven Barfield and Martyn Colebrook, 'Revitalizing the Old Machines of a Neo-Victorian London: Reading the Cultural Transformations of Steampunk and Victoriana', in *Critical Perspectives on Philip Pullman's His Dark Materials:Essays on the Novels, the Film and Stage Productions*, ed by Steven Barfield and Katharine Cox (London:McFarland and Company Inc, 2011) 75-92 (p. 87).

and different quests …is itself a kind of figure for the necessary loss of innocence'[260] in which coming of age involves a process of 'making hundred (sic) of choices…resolving hundreds of crises…you settle on the patterns that suit you.'[261] The process of becoming equally applies to the environment. Ecological crisis appears evident in all of the alternative environments in the multiple worlds within which the quest takes place. However the multiplicity of place and its evolving, transitory status explains a lack of engagement with each place. A sense of this emerges in Margaret Mackey's disappointment in the lack of empathy she feels with Pullman's frozen north. 'The North features as a story element. The thrust of the narrative is forward; as readers we are not really encouraged to linger in the detailed vivification of the northern experience.'[262] Mackey quotes Pullman as explaining that the path of the story was more important than extraneous detail which led him to supply 'a "good enough North" and move on.'[263] Likewise Harry Turtledove criticises Pullman for his depiction of locales like Cittagazze which he describes as betraying a 'slightly insubstantial feel.'[264] By contrast to this lack of detail Pullman uses vivid environmental description to describe the landscape of the mulefan civilisation and that of Lyra's nineteenth-century England as places crucial to the message of the narrative.

[260] Chabon, p. 11.
[261] Kim Dolgin, 'Coming of Age in Svalbard and Beyond', in *Navigating the Golden Compass*, ed. by Glenn Yeffeth, 71-79 (p. 74).
[262] Margaret Mackey, 'Northern Lights and Northern Readers: Background Knowledge, Affect Linking, and Literary Understanding', in *His Dark Materials Illuminated*, ed. by Millicent Lenz and Carole Scott, 57-67 (p. 64).
[263] Mackey, p.65.
[264] Harry Turtledove, 'Occam's Razor and The Subtle Knife: Invention in His Dark Materials', in *Navigating the Golden Compass*, ed. by Glenn Yeffeth, 119-127 (p. 122).

Naomi Wood writes of Pullman's personal view of nature as essentially amoral and cites his description of the innocence of a gibbon tearing a bird apart.[265] Wood suggests that *Materials* represents morality as learned rather than intrinsic. 'Pullman subverts our notions of innocence by first showing children's innocence not as guiltless, but rather as uncouth, even feral – as the absence of knowledge and culture rather than the presence of purity, love, or virtue.'[266] If humanity in its metaphorical infancy comprises an ignorant innocence then this explains Pullman's antipathy toward an atavistic Eden. The past as ignorance awaiting enlightenment emerges in Lyra's pseudo-nineteenth century world where Wood notes the 'Church has determined that … knowledge must be evil because it necessarily compromises the purity of innocence.'[267]

Wood suggests that in *Materials* 'Sin, shame and death come with consciousness not because consciousness is evil, but because we then understand our own actions and their potential effects upon others in a way we did not when we were innocent.'[268]

> The Authority fears humans' independence because of their great physical strength combined with their consciousness, ability to reason, to imagine. With their ability to change and grow as well as their

[265] Naomi Wood, 'Dismembered Starlings and Neutered Minds: Innocence in His Dark Materials', in *Navigating the Golden Compass*, ed. by Glenn Yeffeth,15-23 (p. 15).
[266] Wood, p.17.
[267] Wood, p.18.
[268] Wood, p.21.

> physical ability to manipulate their environment, they have the power to challenge the Authority and his dictates[269]

A number of Pullman critics claim that a non-religious yet spiritual ecological structure exists in *Materials* that reflects James Lovelock's Gaia hypothesis.[270] Lovelock argues that the earth consciously engages in a process that ensures its own sustainability. Katherine Cox and Lois Gresh each argue that 'Dust' represents an ecological 'feedback system.' [271] Mary and John Gribbin suggest that *Materials* features a multiplicity of feedback systems that invest the planet with life.[272] The maze evokes multiplicity and an overwriting of pattern rather than its replication. If the Gaian model did apply then Dust would represent the cosmos acting to consciously encourage transformative human agency despite this action comprising the biggest threat to ecological sustainability.

The following chapters apply an eco-labyrinthine reading to these texts that extends ecocritical approaches to their study.

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[269] Wood, p.21.
[270] James Lovelock, *Gaia: A New Look at Life on Earth*, (Oxford: Oxford University Press, 2009).
[271] Katharine Cox, 'Imagine Dust with a Capital Letter', in *Critical Perspectives on Philip Pullman's His Dark Materials*, ed. by Steven Barfield and Katharine Cox (London: McFarland and Company Inc., 2011), 126-142 (p. 137).
[272] Mary and John Gribbin, *The Science of Philip Pullman's His Dark Materials* (London: Hodder Childrens Books, 2003), p. 144.

Chapter Five

The Ecological Labyrinthine Circuits of *The Lord of the Rings*

> Delineating the antecedents of Middle-Earth is like tracing the roots of a tree. The tree is more than the root, but the root nourishes, strengthens, and steadies the whole.[273]

The quest in *Rings* follows a circuitous route that typifies the recursive journey through a labyrinth. In the course of this chapter I will illustrate how the quest produces numerous instances of doubling of imagery and theme that recall the adjacent points within the winding circuits of the unicursal labyrinth. These points of return comprise subtle differences that add layers to our understanding. The labyrinthine circuits enfold the narrative in a definitive structure that determines the outcome of the quest to redeem the fallen world and bring about ecological renewal.

This chapter illustrates how an overarching eco-labyrinthine scheme emerges in the direction of the narrative of *Rings*. The structure enables us to read other strands of North European mythology as subsidiary to an ecologically Christian reading. The chapter identifies how the labyrinthine structure encompasses within its circuits the Norse metaphor of The World Tree. The chapter relates how the labyrinth scheme develops features of the Norse myth as part of a Christian process that represents progress toward reunion and ecological rebirth. At the same time the chapter identifies the nature of incremental knowledge while situating the revised myth within

[273] Paul Battles, 'What is 'Middle-Earth'? Origin, Evolution and Mythic Function', in *Constructing Nations, Reconstructing Myth: Essays in Honour of T.A.Shippey*, ed by Andrew Wamn, with Graham Johnson and John Walter (Turnhout: Brepols Publishers, 2007), 319-342 (p. 342).

an English setting which articulates its relevance as national myth. In the course of the recursive quest journey repeated encounters with significant trees build towards a teleology for ecological revival. The quest establishes the relevance of a mythological past, ecological consciousness in the present, and an ecological imperative for future sustainability. The chapter identifies a number of elements that reinforce the suggestion that the labyrinth brings nature to life in the narrative. These include references to rhythm, verse and imagery employed. The identification of an overarching mythological structure for ecology addresses an area underdeveloped in ecocritical readings of *Rings*. This structure as a model facilitates an earth-centred approach to *Rings* against which we can assess ecological virtue among character groups.

Trees assume a cardinal significance in Tolkien's ecosophy. *Rings* as a mythology congruent with Northern European tradition builds upon the legacy of Yggdrasil the World Tree central to Norse cosmology. *Rings* parallels the World Tree's connections to three planes of consciousness as it returns to the figure of the tree as signifier at three points within the narrative. Yggdrasil 'grows out of past, lives in the present, and reaches toward the future'[274] and in Norse mythology its three roots are variously located in an underworld (Niflheim), in the real world (Midgard) and in the cosmological world of the gods (Asgard). Each of these three roots maintain the health of the World Tree and by extension ecology as a whole.

Parallels exist between the three locations of Yggdrasil's roots and the evocation of the tree as a signifier in *Rings*. The underworld of Niflheim has its parallel in The Old

[274] Gertrude Jobes, *Dictionary of Mythology Folklore and Symbols*, Part 1 (New York: The Scarecrow Press Inc,1962), p. 1706.

Forest, Midgard stands adjacent to Fangorn Forest in the realm of men, while the White Tree of Gondor provides a link to the cosmological authority of the tree in Asgard. We encounter these evocations of the tree as a signifier of ecological health during the course of a labyrinthine journey of enlightenment. The Christian labyrinth journey describes three incremental stages comprising purgation, illumination and finally union. Related in order of the narrative to the arborial locations these equate the Old Forest as an episode of purgation, the encounter with Treebeard as illumination, and the culmination of the quest as (re)union with nature. The Christian labyrinth's threefold path identifies these three stages as a rite of passage. In this way the entire quest serves as a labyrinthine rite of passage toward ecological recovery. The same Christian threefold path also applies in microcosm as a specific rite of passage to the hobbit characters to prepare them for the ring quest.

Across chapters five to seven in *Rings* the hobbits essentially drop out of the ring quest. The pronounced break from the thrill of hot pursuit by the mysterious black riders led one critic to decry this as the point where 'the unfriendly reader finds an easy stopping place…forty pages of such dull stuff so early in a long work is hard to get over.'[275] These chapters, notably excised from Peter Jackson's acclaimed adaptation of *Rings* for cinema (2001-2003), may bear out Tolkien's antipathy to the adapting and dramatizing of stories in that 'the process invariably reduced them to their merely human and thus most trivial level.'[276] In structural terms these three chapters are integral to a labyrinthine reading. They provide a precis of the meaning

[275] Thomas J Gasque, 'Tolkien the Monsters and the Critters' in *Tolkien and the Critics: Essays on J.R.R. Tolkien's the Lord of the Rings* ed. by Neil David Isaacs and Rose A. Zimbardo (London: University of Notre Dame Press, 1972) 151- 163 (pp. 155-156).
[276] Carpenter, *J.R.R. Tolkien: A Biography*, p. 298.

of the entire work as the rite of passage for the hobbits. They also provide the first metaphorical reference to the World Tree.

Up until this point in *Rings* the hobbits tread a path through their homeland where they encounter nature as prosaic background environment. At the borders of the Shire they stand on the cusp of entering the quest proper which requires a transformation in their understanding of nature and connections to it. At this point the hobbits decide to turn aside from the tamed, direct but physically and metaphorically dangerous passageway offered by the road. They resort instead to seek a path through the mysterious and threatening Old Forest.

A number of elements combine to suggest that The Old Forest comprises an underworld and accordingly serves as a parallel to Niflheim. The text evokes a sense of leaving Middle-earth as much as leaving the Shire. Tolkien employs warnings that originate in hobbit folklore and fairy stories. The reputation of the Old Forest invites reassessment of how we perceive the environment through mythological metaphor. On making their decision to enter the Old Forest the party of four hobbits horrify the custodian of their lodgings who warns 'I am more afraid of the Old Forest than of anything I know about: the stories about it are a nightmare.'[277] Later as the hobbits approach the secret Brandybuck family entrance beneath the circuitous hedge that separates the Shire's border and the Old Forest Merry Brandybuck rejects the nightmare stories. 'If you mean the old bogey stories …about goblins and wolves

[277] Tolkien, *Rings*, p.105.

and things of that sort, I should say no. At any rate I don't believe them. But the Forest *is* queer.'[278]

Verlyn Flieger describes Tolkien's early conception of Faerie (1939) as being 'an effect, an altered state of consciousness'[279] which she attributes to 'the manipulation of language'[280] that post *Rings* he would develop more explicitly to comprise an actual place. At this point in *Rings* the hobbits describe the environment in these terms. Merry describes a sense that the forest flora appears more 'alive', able to interject against intruders, that the wind in the branches of trees at night implies a watchful whispering, and relates that the trees once attacked 'the (boundary) Hedge: they came and planted themselves right by it, and leaned over it.'[281] The hobbits in turn responded by cutting the trees down and burning them in a glade inside the forest increasing the Old Forest's bitter enmity.

Tolkien's personal correspondence shows that the Old Forest interlude was composed between Spring and early Autumn 1938.[282] In a letter of July 1938 Tolkien wrote that 'my mind on the 'story' side is really preoccupied with the 'pure' fairy stories or mythologies of the Silmarillion, into which even Mr Baggins got dragged against my original will.'[283] Into this mix of writer's block and desire to embrace a more deeply mythological theme came another ingredient. In a letter of 4th March, 1938, Tolkien wrote defending close friend C.S. Lewis's *Out of the Silent Planet*.

[278] Tolkien, *Rings*, p.108.
[279] Verlyn Flieger, 'Faerie', in *J.R.R. Tolkien Encyclopaedia: Scholarship and Critical Assessment*, ed by Michael D.C. Drout (Oxon: Routledge, 2013), p. 183.
[280] Flieger, 'Faerie', p.183.
[281] Tolkien, *Rings*, p.108.
[282] Tolkien, *Letters*, pp.33-41.
[283] Tolkien, *Letters*, p.38.

Tolkien and Lewis shared a passion for academic scholarship, Christianity and story-telling. In seeking to justify Lewis's work Tolkien argued his friend's 'story had for the more intelligent reader a great number of philosophical and mythical implications that enormously enhanced without detracting from the surface 'adventure.'[284] In elaborating, Tolkien identified Lewis as essentially engaging with the myth of the Fall and he castigated critics for not perceiving this. In this analysis Tolkien had an advantage, while he also exhibited self-interest. Lewis's story was part of a joint agreement between them to compose tales leading to the discovery of myth. Tolkien's support for *Out of the Silent Planet* had in addition been crucial in getting it published. He attempted to fulfil his own side of the bargain through a new story entitled 'The Lost Road' only to abandon it, the story being published posthumously and incomplete in 1987.[285] This context reveals this point as a time when Tolkien was particularly preoccupied with wider and deeper mythological elements that go beyond the specific plot.

The omnipresent influence of the idea of the Fall in Tolkien's correspondence and his engagement with Lewis at this point may account for the flavour of the Old Forest. The forest location not only recalls Edenic Fall but in recursive episodes it envelops and assimilates within a Christian labyrinthine embrace the historical significance of the tree in Northern European mythology. Structure places non-Christian mythology within the orbit of a design that legitimises it in Christian terms.

[284] Tolkien, *Letters*, p.33.
[285] Colin Duriez, *The Tolkien and Middle-Earth Handbook* (Tunbridge Wells: Monarch, 1992), p. 166.

Entry to the Old Forest abruptly curtails the pursuit that dogged the hobbits across roads, woods, fields, and a river in their homeland. Across three chapters, *The Old Forest*, *The House of Tom Bombadil* and *Fog on the Barrow Downs* a rite of passage tests and prepares the hobbits for re-joining the quest. These chapters encompass stages, which together serve as a microcosm of the entire quest structure. At the same time the episode identifies the forest as the first stage of purgation in a wider engagement with ecology. The separation of the hobbits from the ring plot sees them pass into the earth by passing under the boundary hedge of the Old Forest before two chapters later emerging reborn from the earth of the barrow. The Old Forest's sharply defined boundary typifies liminal places where entry requires crossing a threshold. The term 'threshold' originally referred to the point of entering a building or structure and reminds us that the Old Forest is not uninhabited wilderness but is rather a home, a place of belonging and dwelling, for the flora and fauna within it. The hobbits enter the earth into a world in part mediated by dimly recalled echoes of childhood tales that reflects Tolkien's assertion that fairy stories aid recovery and 'In that sense only a taste for them may make us, or keep us, childish.'[286] The return to understanding in an imaginative childlike way suggests a reappraisal of how we encounter the world while the subterranean passage into the earth's womb is symbolic of fertility. The descent also adds to the sense of entering an underworld a typical mythological site of trial, knowledge, and for those who emerge an altered state of consciousness.

The text disabuses the hobbits of the notion that they live in a world separate from faerie. The Old Forest's close geographical proximity to the hobbits' pseudo-English

[286] Tolkien, *Fairy Stories*, p.373.

homeland of The Shire serves as a physical protection to it. The Old Forest shields the hobbits from immediate pursuit in the quest in the same way that it has more widely provided a safe space that has sustained hobbit society. The presence of the Old Forest in hobbit fairy tales illustrates how the Forest exists on the edge of hobbit consciousness.

The trees and undergrowth now dictate the direction of progress. Tolkien provides the trees with agency to order the direction of a single path to the forest's centre. The forest thus introduces its own parameters within which the hobbits are allowed to move. As a result the hobbits are unable to disregard the forest and treat it as an inanimate background. The forest becomes more than a 'space' between themselves and the continuation of their journey. Instead they are forced to engage with the forest as a living 'place' in its own right. The trees guide the hobbits on a circuitous and disorientating journey. As they progress hobbit consciousness expands as they begin to perceive the hostility of the trees to their intrusion. The route of the labyrinthine path ensures that the hobbits are led to the glade formed when the border hobbits had burnt trees that they had cut down. The sight serves as a reminder of hobbit iniquity and the necessity of purging their ecological sins. Tolkien provides a further reminder of ecological disharmony with parallels to the Fall. Where Milton describes how before the Fall nature bestows blessings on Adam and Eve; 'on their naked limbs the flow'ry roof; Showr'd Roses, which the Morn repair'd' (Book IV, L.772-3)[287] by contrast Tolkien's Old Forest demonstrates the inverse in a fallen world as 'Just behind them a large branch fell from an old

[287] Milton, p.242.

overhanging tree with a crash into the path. The trees seemed to close in before them.'[288]

In providing only hints at the consciousness of trees the outliers of the forest act on the perceptions of the hobbits rather than through overtly exercising supernatural powers. In part this might account for guilt and the subconscious acknowledgement of a need to atone. These outlying trees begin to build a sense of consciousness and agency of trees that intensifies as the forest draws the hobbits to its centre. Tolkien reminds the reader, vicariously engaged in the same psychological rite of passage, that while immobile, trees are living, growing, moving, entities with a value independent of that arbitrarily assigned them by humanity. Leaving the Bonfire Glade the trees continue to dictate the hobbits' path until just as their faith dwindles and they consider retracing their steps out of the forest they discern 'a green hill top, treeless, rising like a bald head out of the encircling wood. The path seemed to be making directly for it.'[289] Tolkien re-emphasises the image a few lines later as the hobbits reach the hillside and as the path 'left the trees and faded into the turf. The wood stood all around the hill like thick hair that ended sharply in a circle round a shaven crown.'[290] This descriptive doubling of the 'bald head' and 'shaven crown' brings to mind the tonsured head of a monk. The green hill rising treeless, whose turf the path fades into, possesses a specifically English mythic resonance to the turf labyrinth.[291] The monastic allusion and the labyrinth twinned with faerie, form an expression of sacred geometry. The hobbits, members of the race that has cut down the trees and burnt them, process up the hill 'winding round and round until they

[288] Tolkien, *Rings*, p110.
[289] Tolkien, *Rings*, p.111.
[290] Tolkien, *Rings*, p.111.
[291] Matthews, p.67.

reach the top'[292] in a procession that recalls the popularly understood penitential purpose of the labyrinth. The manner of traversing the Church labyrinth by clergy/penitents reduced their stature by being undertaken on their knees. The imagery correlates with the struggle of the hobbits (otherwise known as halflings due to their diminutive size) to ascend the hill with their packs.

While on the hilltop we learn that the hobbits wish to avoid 'The Withywindle valley…said to be the queerest part of the whole wood – the centre from which all the queerness comes, as it were'.[293] However the trees determine that the unicursal path leads on to this central point and an encounter with the Old Man Willow who embodies the spirit of the entire forest.

The Withywindle Valley as a primeval wetland environment of 'bogs and pools'[294] recalls elements of Niflheim the 'underworld of misty darkness'[295] where the well Hvergelmir supplies the rivers of the Elivagar that flow at the beginning of the world. Niflheim as a primeval land comprises a negative site in the Norse mythological world as a place of rotting decay, the location of Yggdrasil's root gnawed upon by the serpent Nidhogg[296] and the place to which those who die of disease or old age were consigned under the dominion of Hel, the daughter of the malicious Norse god Loki.[297] As a counterpart to Niflheim the Old Forest also evokes antiquity while the malicious tree with roots in the river represents the malevolence of a tree rotten in

[292] Tolkien, *Rings*, p.111.
[293] Tolkien, *Rings*, p.111.
[294] Tolkien, *Rings*, p.113.
[295] Jobes, *Part 1*, p. 1169.
[296] Snorri Sturluson, *The Prose Edda of Snorri Sturluson: Tales from Norse Mythology*, trans. by Jean I Young (Berkeley: University of California Press, 1992), p. 43.
[297] Sturluson, p.56.

heart. The immediate impression gives credence to Rod Giblett's assertions that Tolkien negatively represents wetland environments in his fiction due to the influence of a pejorative Christian theological perspective.[298] Giblett argues that Tolkien leans heavily on a Christian mythological history that represents wetlands 'as a place created after, and as a result of, the fall'[299] that function as the incubator and home of monsters. Giblett suggests that such a specifically Christian perspective on wetlands 'is largely responsible for the destruction of wetlands in the west for the past millennium.'[300]

While the Fall informs our encounter with the Withywindle Valley the idea of the labyrinthine path as purgation of sins suggests that the penitent holds the responsibility for disharmony. Rather than projecting antipathy toward the Withywindle Valley the environment appears enchanted like the 'perilous realm' Tolkien writes of in *On Fairy Stories*.[301] A land of wonder 'beauty that is an enchantment, and an ever-present peril; both joy and sorrow as sharp as swords. In that realm a man may, perhaps, count himself fortunate to have wandered.'[302] Entering the Withywindle valley from the surrounding forest reveals a 'golden afternoon'[303] an adjective that Tolkien frequently employs to denote virtue, for example in Lorien's golden wood and Rohan's golden hall. The combination of the saturated land and the burning rays of the afternoon sun produce humidity, initially offered as a rational explanation for the hobbits' growing sense of drowsiness.

[298] Rod Giblett, 'Theology of wetlands: Tolkien and Beowulf on marshes and their monsters', *Green Letters: Studies in Ecocriticism*, 19.2 (2015), 132-143.
[299] Giblett, p.132.
[300] Giblett, p.132.
[301] Tolkien, *Fairy Stories*, p.315.
[302] Tolkien, *Fairy Stories*, p.315.
[303] Tolkien, *Rings*, p.113.

Adding to the effect, the landscape becomes eerily dreamy and soporific. The river slow-moving and lethargic becomes dominated by the overhanging and gently creaking willow trees. The breeze only adds to the refrain of fluttering leaves that already cover the surface of the river. Of the quartet of hobbits three succumb to the overwhelming desire to rest awhile under the willow trees. The peaceful environment lulls the hobbits to sleep in a way in which the reader can empathise within the bounds of rational everyday experience. However in the mystical forest the drowsiness comprises an enchantment. The breeze blowing through the branches of the trees appears to describe 'a soft fluttering as of a song half whispered.'[304] The hobbit character Sam a gardener by profession and attuned to the voice of nature, recognises in it a hypnotising lullaby and alone resists the desire for sleep. Two of his companions rest against a large willow which partially consumes them in tightly gripping fissures. Meanwhile Frodo falls asleep on the same tree's root overhanging the river and the tree tips the sleeping hobbit into the water and holds him down.

This tree provides a focal point at the epicentre of the Old Forest's malevolence. Identified as the chief and oldest of its trees it goes by the name 'Old Man Willow'. The genus differs in type from Norse mythology which depicts Yggdrasil as a yew, and fits instead within a definite Christian dynamic. The (weeping) willow possesses biblical associations of grief of the consequences of the Fall. The attack on Frodo heightens the connection to the Christian Fall in that he holds the ring as the symbol of illicit and transformative power. The willow's vengeance has echoes of Tolkien's understanding of Faerie where 'Escapism has another and even wickeder face:

[304] Tolkien, *Rings*, p.114.

Reaction.'[305] Framed within the circuits of the Christian labyrinth the hobbits have been drawn inexorably to face the willow as part of their rite of passage and purgation. Framed within labyrinthine borders powerfully drawn by nature itself, Tolkien's ambivalence in his representation of Old Man Willow reflects his own anger at deforestation. The willow tree serves as a necessary figure whose actions purge the hobbits of their ecological sins contrary to the critiques of Verlyn Flieger and Liam Campbell of the willow as paradoxically providing the first example of villainy in the book.[306]

Illumination follows purgation in the threefold Christian labyrinth and this appears in the hobbits saviour a nature spirit, or *genius loci*, called Tom Bombadil. The character of Bombadil has a number of features at one with an eco-labyrinthine reading of subtext of *Rings*. Bombadil appears as much a celebrant of nature as a nature spirit. He appears at the opportune time to save the hobbits, emerging with a dancing gait as he trips along the forest path. His voice carries as a recursive, happy, rhyming song underlining Le Guinn's perception of the centrality of rhythm in *Rings* that she describes as evoking the sense of breathing.[307] Tolkien's incorporation of sections of verse within *Rings* fits within the conventions of Anglo-Saxon literature. Termed *prosimetrum*, Renee Rebecca Trilling notes that it was a genre that 'enjoyed something of a golden age during the medieval period.'[308] Trilling notes that 'In Anglo-Saxon England, prosimetrum was found primarily in hagiography

[305] Tolkien, *Fairy Stories*, p.377.
[306] Campbell, p.269.
[307] Le Guinn, 'Rhythmic Pattern in *The Lord of the Rings'*, p.105.
[308] Renee Rebecca Trilling, *The Aesthetics of Nostalgia: Historical Representation in Old English Verse* (Toronto: University of Toronto Press, 2009), p. 180.

and spiritual writings.'[309] W.F.H. Nicolaisen discusses how prosimetrum was identified by Joseph Jacobs in 1898 as a feature in the cante-fable; a seminal and widely employed form of folk or fairy tale.[310] Nicolaisen suggests that ''the use of rhyme and verse …is the result of a deliberately and consciously applied distinction between ordinary narrative prose fit to be spoken by or to those who inhabit space beyond, or at least outside everyday life.'[311]

Bombadil's movement through the forest recalls that of the French medieval monks celebrating the paschal dance as they thread their way through the Christian church labyrinth. Bombadil fits the role of celebrant as the water spirit Goldberry dismisses the notion that the land belongs to Tom. 'No indeed!...The trees and the grasses and all things growing or living in the land belong each to themselves.'[312] Bombadil's mastery of the land resembles that of a steward. When he rescues the hobbits from the willow tree he sends the tree back to sleep. The willow tree and the wetland environment remain intact and valued. The willow tree may be an example of the influence on Tolkien of an episode from his past. Humphrey Carpenter's biography refers to a favourite willow of Tolkien that was cut down for no reason other than the apparent thoughtlessness or lack of consciousness of its life.[313] The human agent(s) who destroyed Tolkien's willow would not be described as intrinsically evil but like the hobbits awaiting the revelation in consciousness of the life of trees that can be most clearly articulated through the mythological and faerie form. The non-

[309] Trilling, p.182.
[310] W.F.H. Nicolaisen, 'The Cante-fable in Occidental Folk Narrative' in *Prosimetrum: Crosscultural Perspectives on Narrative in Prose and Verse*, ed. by Joseph Harris and Karl Reichl (Cambridge: D.S. Brewer, 1997), 183-212 (pp. 184-185).
[311] Nicolaisen, pp.184-190.
[312] Tolkien, *Rings,* p.122.
[313] Carpenter, p.39

judgmental attitude of Bombadil to the willow's attempted hobbitcide far from making the tree a villain suggests it has grounds for its rottenness and antipathy. By contrast when Bombadil later rescues the hobbits from the barrow-wight he does so by banishing the evil spirit.

Bombadil invites the hobbits' to follow him as he skips gaily away toward his home. They are unable to keep up but discern the way through listening to his voice, which carries on the wind to them still echoing in rhyming couplets. Within Bombadil's verse two trees are mentioned by name; 'Fear no alder black! Heed no hoary willow!'[314] The willow has already been encountered and discussed in relation to its Christian allusions and their ecological significance. Tolkien's choice of the alder as a corresponding representative of the forest flora twins Christian with national mythic allusion. With his interest in mythologies Tolkien would have been well aware of the alder's connection with the figure of Bran the Blessed. Bran was 'an alder deity'[315] revered across Ireland, Wales and England and 'a god of the underworld.'[316] The presence of alder and willow within the labyrinthine circuits that the hobbits tread invest the narrative within spiritual and national significance. The labyrinth provides coherence to these separate elements, binding them within a deep ecology approach with Christian attributes. When Bran approaches death he asks his followers to decapitate him and his severed head serves as a source of great wisdom and prophesy. On its instruction it was buried on the site where the Tower of London would be built to protect England from invasion.[317] The Old Forest, as Faerie, standing at the edge of the hobbit kingdom of the Shire performs a similar

[314] Tolkien, *Rings*, p.118.
[315] Jobes, Part 1, p.242.
[316] Jobes, Part 1, p.242.
[317] Jobes, Part 1, pp.241-242.

protective role in shielding the Shire from attack (and by extension Tolkien's understanding of England and Englishness). In microcosm this defensive role of faerie finds expression in how the forest protects the hobbits within from the immediate pursuit by their Ringwraith pursuers. It obliquely identifies the importance of faerie to the maintenance of environment and the integrity of the nation state.

Tolkien sets Bombadil apart from the forest. The nature spirit dwells outside of its borders, creating a distance from any notion that wilderness has an anthropomorphic overlord. The approach to Bombadil's house coincides with the coming of night. As the hobbits depart the forest its resemblance to the Norse underworld of Niflheim heightens. The forest's eaves become wreathed in misty vapours that 'began to rise and curl on the surface of the river and stray about the roots of the trees.'[318] The change in atmosphere marks the end of the time within the ephemeral ecological environment. The sense of continuity however persists in the descriptive doubling that Tolkien employs as the hobbits enter Bombadil's habitation. Tolkien writes of the hobbits' finding themselves encircled once more by golden light when they reach the threshold.[319]

The chapter *In the House of Tom Bombadil* forms the locus of illumination in relation to the forest: the hobbits relationship to it; the ultimate power of nature over artifice; and, legitimacy over illusion. Tolkien skilfully incorporates this wider discussion that touches on authentic and inauthentic forms of power. The beauty of nature astounds the hobbits when entering an apparently humble and prosaic dwelling. The guests are dazzled by the radiance of nature embodied in Goldberry, the genius loci of the

[318] Tolkien, *Rings*, pp.118-119.
[319] Tolkien, *Rings*, p.120.

river and Eve to Bombadil's Adam. Frodo compares the delight of the nature spirits to the semi-divine elves and concludes that 'less keen and lofty was the delight, but deeper and nearer to mortal heart; marvellous and yet not strange.'[320] Bombadil relates that he expected the hobbits to be drawn to the valley as 'all paths lead that way.'[321] Bombadil employs the labyrinth paradigm in describing the trickery of Old Man Willow's 'cunning mazes' as indicative of his unnatural behaviour.[322] Nevertheless the hobbits unicursal route through the forest endorses the encounter with the willow tree and meeting with Bombadil as part of the same rite of passage. The biblical Fall intrudes as an ecological reference point in Bombadil's claim to be the first inhabitant of Middle-earth.[323] However the unfallen Bombadil's virtue appears intact and the Old Forest differs from negative images of corrupted landscapes that follow. Places such as Moria and Mordor twin danger with decay and degradation of ecology in barren lands lacking in bio-diversity. As Bombadil narrates the history and mythology of the Old Forest the hobbits move from perceiving the forest in spatial terms, as land as yet unclaimed for the purposes of settlement by cognate beings, to appreciate it as a special biodiverse 'place' in its own right. 'As they listened, they began to understand the lives of the Forest, apart from themselves, indeed to feel themselves' the strangers where all other things were at home.'[324] The sense that the hobbits act as intruders in another's home extends to Bombadil who visits the Old Forest but dwells as its neighbour. As an unfallen Adamic figure Bombadil offers an insight into how to redeem fallen humanity. In this guise he and Goldberry evince a system of values and estimation of

[320] Tolkien, *Rings*, p.121.
[321] Tolkien, *Rings*, p.124.
[322] Tolkien, *Rings*, p.124.
[323] Tolkien, *Rings*, p.129.
[324] Tolkien, *Rings*, p.127.

worth based on pre-lapsarian principles. Goldberry pointedly estimates Frodo's worthiness through 'the ring in your voice'[325] as a counterpoint to his importance due to the concealed ring in his pocket. Bombadil further diminishes the ring of power as an omnipotent force as on his finger the ring has no effect. It does not make him disappear or fade. The power of Bombadil as the signifier of nature exceeds the hubris of the sub-creative power. Prefiguring the fate of the ring which cannot be undone through the use of further technology but can only be vanquished through nature, Bombadil makes the ring itself briefly disappear in a conjuring trick. Accompanying this we find the startling image that contrasts Tom's bright blue eye twinkling as he looks through the ring as a counterpart to Sauron's burning red eye lustfully searching for it. A further symbolic parallel here links the text to Norse mythology. The single eye recalls the principal Norse God Odin who sacrificed an eye to acquire wisdom from beneath the root of The World Tree in the waters of Mimir's Well. The parallel warns against pagan religion and the acquisition of illicit knowledge. Chastened by the mocking of the ring Frodo puts it on yet, while invisible to his companions still psychologically tied to the materialistic world, he remains visible to Bombadil. This highlighting of the illusion of power over nature causes the nature spirit's mood to change as he warns, 'take off your golden ring! Your hand's more fair without it…Tom must teach you the right road, and keep your feet from wandering.'[326] The singular use of 'road' here metaphorically encompasses both a physical path and a moral code in each case Bombadil makes the hobbits subject to a single course to follow.

[325] Tolkien, Rings, p.122.
[326] Tolkien, *Rings*, p.131.

Following illumination as the second step in the threefold Christian labyrinthine path the hobbits now move to its final stage of (re)union. This phase marks the point at which the walker of a spiritual labyrinth reflects on their journey and employs what they have gained in the wider world. Re-union appears at the end of the third and final chapter of the break with the ring quest proper. The end of the rite of passage verses the hobbits in understanding the world of Faerie and completes the whole narrative scheme in microcosm. Bombadil directs the hobbits to by-pass the barrows and standing stones on the edge of his country. In leaving Tom's pseudo-Eden the hobbits encounter these early pagan markers as they move forwards physically and figuratively in time towards re-entry into their own world to continue their quest.

The presence of the barrows and standing stones disabuses the reader of any pagan sympathies in *Rings*. As Tom Shippey contends Tolkien intended *Rings* to present a vision of 'God's plan, an evangelica praeparatio …He knew his own country was falling back to heathenism…professorial preaching would make no difference, a story might.'[327] Shippey's thesis is attuned to Tolkien's belief in the power of the story to convey elements of the immanent truth of Christianity.[328] The barrow and standing stone here represent a dangerous, corrupted and flawed spiritual relationship with the world leading towards death. In cyclical labyrinthine fashion the narrative returns to the same theme in the final part of the trilogy when Aragorn calls on the living-dead who are damned by their oath-breaking to redeem themselves before the standing stone at Erech.[329]

[327] Shippey, *The Road to Middle-Earth*, p. 209.
[328] Tolkien, *Letters*, p.101.
[329] Tolkien, *Rings,* p.770.

The chapter *Fog on the Barrow Downs* that brings the rite of passage to an end describes the physical conditions that lead the hobbits astray. It also figuratively twins a masking agent that distorts reality, blinds and obscures light with signifiers of pagan worship. Writing of the hobbits being consumed in a barrow simultaneously facilitates a swipe at paganism while satisfying the need to mark a return from a pointedly subterranean underworld. The return demarcates between good and evil forms of esotericism with the latter a place of confusion. Within the underground barrow Tolkien places the hobbits in a swoon. Frodo awakes first and finds his unconscious friends dressed in white druidic robes ready for sacrifice. In contrast to the harmonious rhyming of Bombadil the barrow echoes to discordant music. Frodo has a choice to make about how to escape. While tempted to use the power of the ring he realises this will only save himself and consign the others to their fate. Highlighting the peril of the ring we find the barrow-wight represented as a disembodied hand whose fingers crawl toward the sacrificial hobbits. At this point of extreme danger Frodo recalls Bombadil and recites a litany Bombadil taught the hobbits to use to invoke his help.

Representing the greater power of good over evil the nature spirit Bombadil destroys the barrow and saves the hobbits. The hobbits who entered a labyrinth by passing into the earth and out of the tale of the ring, now return to the quest metaphorically reborn out of the earth. Their saviour as representative of nature stands for the cycle of life and rebirth from the soil. The hobbits emerge from the earth naked, but unharmed in a symbolic conclusion to the rite of passage. The episode provides a salutary warning about the difficulty of following the right path while the serendipity of the descent into the barrow appears in the unexpected provision of a weapon that

will subsequently play a crucial role in the successful denouement of the ring quest.[330] The main benefit of the rite of passage rests in how it alters consciousness of the world. The labyrinthine path leads the questers through experiences and to a figure that combine to impart knowledge and ecological morality. These lessons continue as the text moves circuitously forward. As the hobbits leave Bombadil, Samwise Gamgee reflects, 'I am sorry to take leave of Master Bombadil…He's a caution and no mistake.'[331] Indeed Bombadil and the Old Forest episode do provide a note of caution and reference to the wider ecological subtext within which the ring quest takes place.

The World Tree appears as a primary marker of the recursive pattern of *Rings* as ecological subtext at another point where the narrative splits from a direct focus on the ring quest. By this point the circuitous route of the company of the ring reaches a juncture where the individual journeys of characters separate. Frodo and Sam embark on a path that leads into the maze of Cirith Ungol and on to the evil and despoiled land of Mordor, the kingdom of the Dark Lord. Their erstwhile hobbit companions Merry and Pippin escape from captivity and seek refuge in a forest they recall they 'have been warned against' as a place supernaturally hostile and supposedly uninhabited. [332] If *The Old Forest* episode essentially purged the hobbits during their rite of passage then this second forest primarily represents illumination as the second stage of the Threefold Path. Unlike the faerie realm allusions of *The Old Forest* chapter, with its separate mythological identity, Fangorn forest and its concerns directly relate to the power struggle within Middle-earth. This earthly

[330] Tolkien, *Rings*, p.824.
[331] Tolkien, *Rings*, p.144.
[332] Tolkien, *Rings,* p.448.

evocation of the mythic tree has its parallel in the location of the second root of the Norse World Tree which lies accessible to and grounded within the visible world, in Midgard 'also called Manna-heim (home of man).'[333] Whereas The Old Forest bordered the hobbit home of The Shire, Fangorn stands adjacent to the tower of Orthanc, the home of the corrupted wizard Saruman and notionally within the aegis of the human realm of Rohan.[334]

In reprising the motif of the misunderstood and dangerous forest we meet the chapter's eponymous hero known colloquially as Treebeard, but also by the more formal Fangorn which indicates his rightful lordship over the forest. As an arborial mythic evocation of nature Treebeard serves as chief of the ents, the treelike creatures described by Robert Foster as 'Tree-herds, evidently trees inhabited by spirits.'[335] The hobbits first encounter the foreboding forest wreathed in darkness, the last refuge of the night against the new dawn.[336] The symbolism signifies their arrival at a point of dark despair but with the prospect of being present at the illumination of the awakening of a new day.

The hobbits and Treebeard are equally surprised by each other when they inadvertently meet. Treebeard eventually determines that they are harmless and trustworthy, acts as their custodian, and discusses with them the parlous political situation and its intrusion into the forest. Within the forest's precincts the wizard Saruman corrupted by his lust for power has transformed his impregnable fortress in

[333] Jobes, *Part 1,* p.1100.
[334] Hilary Wynne, 'Rohan', in *J.R.R. Tolkien Encyclopedia: Scholarship and Critical Assessment*, ed by Michael D.C. Drout (Abingdon: Routledge,2007), p. 575.
[335] Robert Foster, *The Complete Guide to Middle-Earth: From The Hobbit to The Silmarillion*, (London: Unwin paperbacks, 1978), p. 123.
[336] Tolkien, *Rings*, p.448.

the tower of Orthanc into a military-industrial complex. Saruman's personal ambition marks a rejection of his role of wizard as an emissary for good in Middle-earth. For Saruman progress requires transformation which involves breaking free of parameters and an assigned place as part of a wider system. Saruman seeks power to alter the world and views entities as base resources. Accordingly Saruman rejects the single-coloured robe of white assigned to him as a mark of his rank as emissary, informing the virtuous wizard Gandalf:

> 'For I am Saruman the Wise, Saruman Ring-maker, Saruman of Many Colours!'
>
> I looked then and saw that his robes, which had seemed white, were not so, but were woven of all colours, and if he moved they shimmered and changed hue so that the eye was bewildered. I liked white better,' I said. White!' he sneered. 'It serves as a beginning. White cloth may be dyed. The white page can be overwritten; and the white light can be broken.'
>
> In which case it is no longer white,' said I. 'And he that breaks a thing to find out what it is has left the path of wisdom.'[337]

Saruman's will to shatter the boundaries of nature extends to the creation of a genetically-modified race of orcs to match the counterfeit slave soldiers of the main representative of evil in the book the Dark Lord Sauron. Yet Saruman presents a far more human figure than the disembodied red eye. In his desire for control and authorship Saruman betrays a desire to make himself a god of a world full of his own

[337] Tolkien, *Rings*, p.252.

creations. The surrounding forest, wild and authentic, appears to him as an affront to his own powers over the environment. Saruman replaces avenues of trees with rows of stone pillars. While he uses some trees to fuel the furnaces through which to forge devices and weapons, other trees are felled for no apparent reason.

Saruman presents a vision of the 'progress' of the dominant secular culture contemporary to the construction of the narrative while the wider threat he poses to Middle-earth as a whole adds an analogy to the Anthropocene. Saruman champions a form of progress which rudely intrudes into the distant Shire at the book's conclusion where he imposes a system of servitude to exploit the land to replace the hobbit ethos of self-sustainability.

In Fangorn the recursive textual structure illustrates the consistency of a labyrinthine architecture. Treebeard as a powerful tree with the agency to interact with the hobbits on behalf of the forest recalls Old Man Willow and accounts for the hobbits and the readers' preparedness to accept such a figure as more than a *deus ex machina*. Saruman embodies the sense of fall as an inverse reflection of Bombadil. As a guiding structure the labyrinthine reading encourages reflection on points that may be distant in time and space but which philosophically reside in loops adjacent to each other.

Saruman evokes some of the worst excesses of contemporary society in aspiring to the station of a god: waging war; extending imperial ambitions; enslaving a weaker race; despoiling; over-exploiting; and establishing a model of trade that imposes ecological hegemony. Saruman's departure from his original state recalls Douglas

Tompkins' summation of modernity in which 'to invoke "the wrong road" metaphor, (means) we should turn around and get back to a place of which we are surer.'[338] Saruman's eventual fall substantiates Tompkins' call for us to:

> rethink the notion of so-called progress and figure out an entirely different development model: one in which nature is the measure and not the reductionist Cartesian logic that puts human cleverness ahead of the workings of nature. We need to reinstate an organic model of the world and reject the machine one. We must rethink the worldview that humanity has foolishly adopted—the rampant sense of entitlement and arrogance that allows us to transmogrify the planet with our technologies.
>
> Somewhere, some number of centuries ago, we took the wrong road, forging on with false certainty and bullheadedness. We have driven countless species to extinction and continue to do so every day… (we) need, in my opinion, to reorient toward another worldview. One in which the primary ethical and ecologically intelligent position is to share the planet with all other creatures, and set our goals for a fulfilling life using different objectives than the format of the techno-industrial consumer culture.[339]

The imperative for change appears in *Rings* in non-anthropocentric terms. Nature owns the backlash against Saruman, rather than being a narrative tool employed in

[338] Douglas R. Tompkins, Turning Around from the Wrong Road Taken, *The Trumpeter*, 32.1 (2016), 10-15 (p. 12).
[339] Tompkins, p.14.

assistance of humanity. Eco-Linguist Arran Stibbe argues that presenting non-human lifeforms as active agents develops a deep ecological consciousness of their life as 'sentient beings actively engaged in living their lives'[340] who exercise the 'mental (cognitive) process of "knowing"...as conscious beings.'[341] In this way Stibbe argues we recognise their lives as intrinsically valuable irrespective of humanity. At the same time Stibbe identifies the need to highlight aspects of non-human life that reveal self-worth in human terms and of their suffering as individuals rather than as a species. When presented as a species subject to habitat loss or destruction, Stibbe notes that non-human lifeforms are denied intrinsic value at an individual, ie personal, level with the agent of their destruction (humanity) often only visible by implication rather than being referred to directly.[342]

Rings delivers a blow to human hubris through Saruman's downfall which unmasks his power as temporal and unsustainable. The downfall of Saruman materializes through the very ecology that he has disregarded. The value of individual non-human lives that Stibbe identifies as important emerges in the battle between the ents and the wizard. Tolkien graphically describes the horror of the nature of attacks on trees through the personal destruction of individual trees. Tolkien endows individual trees with names and invests them with their own personalities and characteristics seen through the commentary of the hobbits who have come to know them.

[340] Arran Stibbe, 'Deep Ecology and Language: The Curtailed Journey of the Atlantic Salmon', *Society and Animals,* 14:1 (2006), 61-77 (p. 73).
[341] Stibbe, p.73.
[342] Stibbe, p.68.

> Quickbeam gave a cry “the tree-killer, the tree-killer!” Quickbeam is a gentle creature, but he hates Saruman all the more fiercely for that...his people suffered cruelly from orc-axes’ …
>
> ‘Several of the Ents got scorched and blistered. One of them, Beechbone I think he was called, a very tall handsome Ent, got caught in a spray of liquid fire and burned like a torch: a horrible sight.[343]

Rings carefully retains the ents integrity as arborial lifeforms in their transformation into actors. While they acquire the ability to communicate in the common speech of Middle-earth, ents possess their own language that reflects the long-life and slow growth of trees. The essential ability to communicate through the gift of speech incorporates the ents into the narrative. It also extends faerie beyond the underworld rite of passage and corresponds with Tolkien’s essay ‘On Fairy Stories’. Here Tolkien excludes from Faerie those stories that gift human language to the non-human merely to enable them to function as proxy humans. However he regards ‘The magical understanding by men of the proper languages of birds and beasts and trees ...(as) much nearer to the true purposes of Faerie’[344] which encompass humanity’s desire ‘to hold communion with other living things.’[345] The ent language captures and represents the long history of the nature of subjects they converse about. As such Treebeard suggests that the exactitude of their speech makes it superior. He demonstrates this with his own name ever growing to reflect his personal history and development. He states that ‘Real names tell you the story of

[343] Tolkien, Rings, p.554.
[344] Tolkien, *Fairy Stories*, p.328.
[345] Tolkien, *Fairy Stories*, p.326.

the things they belong to in my language, in the Old Entish as you might say.'[346] This long-winded, circuitous and considered language underlines the longevity of Treebeard and of an observational nature developed over a long period of time. Humanity stands humbled before such profound longevity and permanence which finds its equivalence in Aldo Leopold's mountain in his contemporary ecological tract *A Sand County Almanac: And Sketches Here and There*.[347] Another aspect of the integrity of the ents resides in the independence of their decision to rebel against Saruman. Treebeard does not act here as the subordinate ally of the confederation ranged against the wizard, which includes humans and hobbits. 'I don't know about *sides*. I go my own way; but your way may go along with mine for a while'.[348] We will encounter the same sentiments later (see Chapter 9) in regard to Pullman's depiction of Iorek, the armoured polar bear in *Materials*. Both cases infer a wider legitimacy to action within the quest that has a wider ecological significance.

In *Rings* the suggestion of two paths converging for a time illustrates the realisation that while individual human lifespan is less than that of trees they are temporally joined in a common struggle. The manner in which the ents act in *Rings* retains their authenticity as trees. Trees grow over extended periods of time, at a rate in temporal terms barely perceptible to humans, as they react to external conditions. When the ents rise the text primarily manipulates how they act in relation to time. This empowers the trees to accomplish Saruman's overthrow and the destruction of Orthanc according to their nature; 'It was like watching the work of great tree-roots in

[346] Tolkien, *Rings*, p.454.
[347] Leopold, p.129.
[348] Tolkien, *Rings*, p.455.

a hundred years, all packed into a few moments.'[349] The careful cultivation of the idea that ents possess the ability to accelerate growth finds further expression in the effect of the ent draught on the two hobbits. The draught increases the hobbits' vitality and facilitates their own physical growth beyond the size to which hobbits typically develop. The imbuing of physical health and strength qualitatively differs from the Norse mythology of Midgard where Mimir's well, which The World Tree taps, is a source of knowledge rather than an invigorating physical tonic.

Tolkien depicts Saruman's downfall through his battle against nature, the futility of which emerges in its echoes of the Norse myth of the downfall of the gods at Ragnarok (Armageddon). Ragnarok marks a final battle in Norse mythology. Insinuating elements of Ragnarok before the conclusion in *Rings* highlights that Norse mythology might fit within a Christianized labyrinth cosmology consistent with Tolkien's interest in Northern European myth as an imperfect rendering of God's word illuminated in a later age of Christian revelation. Drawing on evidence from Snorri Sturluson's *Prose Edda* (c.1220), striking parallels appear between imagery in Norse mythology and *Rings.* Foreshadowing Ragnarok the World Tree Yggdrasil shudders in anticipation. The *Prose Edda* describes how; 'Heimdall blows loud/his horn raised aloft,/Odin speaks/with Mimir'shead;/Yggdrasil trembles,/old outspreading ash,/and groans/as the giant gets free.'[350] Similar imagery appears in *Rings*, 'we went to Entmoot, a gathering of Ents…it lasted all that day and the next…in the third day of their moot, the Ents suddenly blew up. The Forest had felt as tense as if a thunderstorm was brewing inside it…like a music of horns and

[349] Tolkien, *Rings*, p.553.
[350] Sturluson, p.88.

drums.'[351] Prefiguring the ent attack a pre-apocalyptic blast serves as a counterpart to Heimdall's call at Ragnarok. 'A great hoom, hom rang out like a deep-throated horn in the woods and seemed to echo from the trees'[352] and as 'Night fell and there was silence: nothing was to be heard save a faint quiver of the earth beneath the feet of the Ents.'[353] The parallel with Norse mythology lends added significance to the depiction of Treebeard's part in Saruman's downfall in *Rings.* Christopher Abram notes that Yggdrasill 'has a consistent connection with fate and judgment: it is where things happen, where decisions get made, where the course of events is determined.'[354] The victory over Saruman marks a point at which the tide begins to turn in *Rings*, and it is notable that this is articulated through the machinations and assimilation into the struggle of nature itself. A similar pivotal incorporation of natural assistance appears in *Materials* (see discussion in Chapter 8) when rivers flow backward which facilitates and legitimises the quest.

In Levi-Straussian terms the Norse influence in this section enables us to read one myth (the Norse saga) against another (*Rings*) to discern meaning.[355] *Rings* acknowledges and accounts for the Northern European myth in Christian terms by inverting the Norse myth of destruction and the end of the world. The *Flotsam and Jetsom* chapter shows that rather than the World Tree being destroyed and the earth returned to elemental chaos humanity returns to its elemental state due to its attack against nature, as per Norse mythology where 'humans originate as animated pieces

[351] Tolkien, *Rings*, pp.550-551.
[352] Tolkien, *Rings*, p.468.
[353] Tolkien, *Rings*, pp. 475 – 476.
[354] Christopher Abram, *Evergreen Ash: Ecology and Catastrophe in Old Norse Myth and Literature* (Charlottesville: University of Virginia Press, 2019), p.87.
[355] Claude Levi Strauss (1958) 'The Story of Asdiwal' in *Sacred Narrative: Readings in the Theory of Myth,* ed by Alan Dundes (Berkeley: University of California Press, 1984), p. 296.

of driftwood.'[356] The submersion of Orthanc by water mirrors the aftermath of Ragnarok to envelop and account for Norse mythology within the mythology of Middle-earth with its Christian scheme. The ent rebellion replaces Armageddon with a hopeful narrative tied up with Tolkien's concept of eucatastrophe as the unexpected joyful turn in events.[357] Ragnarok's incorporation as an event, in place of destroying the supernatural, removes the power of one who departed from the right path.

To emphasise the corollary to Norse myth *Rings* adds a further detail. Midgard links with Asgard, the abode of gods, through 'Bifrost, the Rainbow bridge.'[358] In *Rings* the same association forms through the ents' flooding of the Wizard's Vale to exhaust the flames of war which traps Saruman and produces 'a great rainbow.'[359] A facsimile of Bifrost emerging through the overthrow of Saruman suggests that nature's rebellion forms a bridge to restoring a link between the earth and the heavens. The same link appears in the Bible (Genesis 9:1-17) where a rainbow symbolises the renewed covenant between God and humanity as part of the Flood narrative. David Horrell writes of how the cleansing flood rebalances life on earth, while God's covenant to henceforth abstain from destroying the earthly abode 'is emphatically and repeatedly said to be with all living creatures, indeed with the whole earth.'[360] The biblical flood serves as a further punishment of fallen humanity, on the

[356] Heather O'Donoghue, *From Asgard to Valhalla: The Remarkable History of the Norse Myths* (London: I.B Tauris & Co Ltd, 2013), p.166.
[357] Tolkien, *Letters*, pp.100-101.
[358] Gertrude Jobes, *Dictionary of Mythology Folklore and Symbols,* Part 2 (New York: The Scarecrow Press Inc,1962), p. 1100.
[359] Tolkien, *Rings*, p.557.
[360] Horrell, p.46.

earthly plane, that potentially undermines anthropocentrism through the covenant's inclusive and interconnected Christian vision.

Treebeard provides a significant and tangible motif easily assimilated into altering ecological consciousness. We are invited to read him into our own lives through noticing his equivalent in moss covered trees on our own woodland walks. Through Treebeard we are reminded that trees are intensely alive. In mythological terms Treebeard provides a non-anthropocentric alternative to the anthropomorphic Green Man the half human symbol of regeneration.

The third and final root of the Norse World Tree can be found in Asgard the abode of deities. This root stands preserved from decay by the Norns, a triumvirate of goddesses presiding over fate. The threefold path of the Christian labyrinth similarly culminates in union with heavenly power. The ecologically spiritual nature of *Rings* emerges in the powerful imperative to restore harmony and balance with nature after the destruction of the ring has been achieved. This elucidates a wider justification and meaning for the epic. The journey through the labyrinth of the narrative has led to the destruction of a single, immediate ecological threat. The labyrinth however represents an eternal and holistic cycle, features that point to the continuation of the quest to pursue the eco-labyrinthine way. In effect a justification of Naess's fundamental principles of deep ecology over the narrow single-issue, self-interest of shallow ecology.

A new ecological spring emerges through the new life of trees that legitimize and sacralise the quest. The sacred tree of fate, or the embodiment of the third root of

the World Tree, can be found in the White Tree of Gondor. Aragorn's deeds and bloodline would appear sufficient sanction on their own to legitimize his kingship. However he understands that the success and revival of the kingdom under his rule rests upon the restoration of a sacred tree. The original White Tree, the 'Tree in the Court of the Fountain is still withered and barren'[361] and will only be reborn at the time that the rightful king appears. The strength of prophesy and fate to determine the future suggest a teleological design and purpose behind *Rings*. The teleology brings to an end one age of Middle-earth and ushers in another, the age of man.[362] Aragorn, the new King of Gondor, bears the burden of the fate of the world resting in the hands of mortal humans. Human mortality underlines the uncertainty of the future and recursive nature of eco-labyrinthine struggle. Each new generation of humans will face the same issues of good and evil, in the ages that they inhabit.

Aragorn acknowledges the spiritual truth that links ecological health to the state of the nation and his own legitimacy as ruler. The White Tree in ancient lore acts as an omen and a barometer. It would be difficult to make the link between spiritual, ecological and human health more explicit. The sanctifying reconciliation with nature requires that Aragorn journeys on Gandalf's advice to the ecological, barren margins of his kingdom where he finds a sapling of the original White Tree growing. Here Aragorn and the Wizard converse in high-blown, biblical language. 'Lo! Here is a scion of the Eldest of Trees!' cries Aragorn. The wizard's rejoinder the no less lofty; 'Verily this is a sapling of the line of Nimloth the fair.'[363] The wizard goes on to give its' line of descent from a precursor in a heavenly realm in distinctly biblical tones.

[361] Tolkien, *Rings*, p.950.
[362] Tolkien, *Rings*, p.950.
[363] Tolkien, *Rings*, p.950.

The tree serves as more than an immediate symbol of return. Gandalf who has already physically and metaphorically crossed the abyss of death in Moria and returned clothed in white as leader of the wizards instructs Aragorn that when the tree produces fruit it should be planted to make sure that it does not die out. He also notes that the tree comes from a longer line of descent than Aragorn himself does as rightful king. Tolkien articulates the harmonious twinning of health of humanity and nature by describing how the young tree willingly relinquishes the soil to enable Aragorn to transplant it. As it quickly thrives and blossoms Aragorn perceives through this a sign that the time is ripe for his marriage to the Elf Queen, Arwen. The tree is not only the essential component in his legitimacy to rule but also in the continuation and sustainability of his line. The physical tree complements the family tree joining humans together in a wider familial relationship with nature. The renewed cycle articulated through the circuitous quest restores divine order. The rise of Aragorn as the sun king at the dawning of a new golden age comes replete with the heraldic imagery of the White Tree as the emblem of Gondor. This symbol holds a special significance to England in that the office of Lord Steward of the realm takes as its insignia a white staff. As an analogy this suggests that while Aragorn now becomes king he remains a steward in his relationship with the environment. The restoration of the king and the tree links the thriving of humanity and the natural world and powerfully establishes an eco-labyrinthine national identity.

In diminutive form we find the same process of arborial renewal in Tolkien's hobbits parallel pseudo-English land of the Shire. Symbolic to the swift regeneration of the war despoiled Shire we find another spiritually enchanted tree. Galadriel's gift of a few grains of enchanted soil and a seed from an elven tree, combine with Sam

Gamgee's care as gardener and steward of environmental regeneration. Together these enable replanting of new native trees and the establishment of an elven tree to replace the Party Tree, the most auspicious single tree of the Shire. The enchanted grains of soil ensure inordinate growth that enables the gardener to enjoy the fruits of his own labour, symbolising the link between the revival of the Shire and its ecological health.[364] The connection between fate, stewardship of nature and divinity establishes a temporary Golden Age in Middle-earth at the end of the ring trilogy in which the tree is emblematic. It also links the quest to an on-going, cyclical ecological struggle that we are all invited to join in. Lastly the eco-labyrinthine architecture ties the whole narrative together in a significant way that highlights the centrality of the tree. The links challenge Tom Shippey's suggestion that 'the work as a whole depends very largely on tableaux: separate images of places, peoples, societies, all in some way furthering the story, but sometimes (as with Bombadil or Willow-man) not furthering it very much, there mostly or largely for their own sake.'[365]

As an immanent reflection of divinity the labyrinth's depiction of the cycle of life forms a natural theology that is panentheist in complexion. Niels Henrik Gregersen describes panentheism as 'the view that "all things exist in God", even though God is not exhausted by the world of nature.'[366] Panentheism was re-popularised in the 1940's and 1950's primarily by Charles Hartshorne[367] a former student of Martin Heidegger. Chad Meister notes that panentheism while rooted in the ancient past has subsequently experienced a pronounced resurgence in the late twentieth

[364] Tolkien, *Rings*, p.1000.
[365] Shippey, *The Road to Middle-Earth*, p.139.
[366] Niels Henrik Gregerson, 'Panentheism: Promises and Problems', *Theology, and the Sciences*, 3.1 (2016), 1-7 (p. 1).
[367] Charles Hartshorne and William L. Reese, *Philosophers Speak of God* (Chicago and London: The University of Chicago Press, 1953).

century across many religions but particularly in Christianity. Meister defines panentheism as a reaction against classical theism's concept of 'divine impassability, that God is unaffected by the goings-on in the world, including that God in no way experiences the pain or suffering of God's creatures.'[368] Panentheism by contrast argues that God experiences the travails of the world 'from within… Nevertheless, what is meant by God being "in" the world for panentheists is often somewhat vague. It is primarily a metaphysical and religious metaphor.'[369] Gregerson suggests that 'God is best conceived of as the circumambient reality enclosing all existing entities, structures, and processes, and as operating in and through all, while being 'more' than all.'[370]

This chapter illustrates how a unicursal labyrinthine pattern marries rite of passage, narrative, and ecological order. To develop the argument that a labyrinthine binary applies to *Rings* the following chapter will focus on labyrinthine exegesis through looking at the negative depiction of environment through multicursal maze imagery.

[368] Chad Meister, 'Ancient and contemporary expressions of panentheism', *Philosophy Compass*, 12:e12436, (2017), 1-12, p.4.<https://doi.org/10.1111/phc3.12436> [accessed 14 November 2017].
[369] Meister, p.5.
[370] Gregerson, p.4.

Chapter Six

In Wand'ring Mazes Lost:- The Mines of Moria and The Pass of Cirith Ungol

Others apart sat on a Hill retir'd,
In thoughts more elevate, and reason'd high
Of Providence, Foreknowledge, Will and Fate,
Fixt Fate, free will, foreknowledg absolute, [560]
And found no end, in wandring mazes lost.
(John Milton, Paradise Lost, Book 2, 557-561).[371]

This chapter shows how evil is made manifest in landscapes with maze-like qualities. It illustrates how mazes represent the highest concentration of evil and mortal threat in *Rings*. The maze also stands in as a physical expression of the elusive figure of Sauron as manifestation of evil. The chapter shows how the maze represents multiplicity as overwriting an authentic and sustainable structure. The maze appears at two particular points in the narrative that illustrate the nature of recurring ecological challenges predicated by structural deviance. To illustrate the similarity between these episodes the chapter identifies common themes that appear in each of them. The similarity of these episodes underlines the maze as subordinate to the recursive labyrinth.

The multicursal maze represents a repudiation of the unicursal labyrinth. As a metaphor it evokes confusion, uncertainty, error and betrayal. Mazes can be physical or psychological. In *Paradise Lost* John Milton describes the fallen angels as trapped

[371] Milton, p.187.

within mental mazes. Milton goes on to describe the consequences in the fallen angels' exploitation and despoiling of the environment. Their renunciation of God continues through their attitude to the bio-divinity of pattern in nature. This leaves them lost both mentally and physically in a desolate maze of their own making without hope of resolution.

Paradise Lost illustrates how mazes of the mind create similar physical spaces that overwrite and subvert the pattern of nature. Echoing this *Rings* depicts the centres of environmental degradation in maze-like places. These present a barren, unnatural and deceitful contrast to the authentically virtuous natural environment. At two points in the epic the ring quest encounters such mazes which disorientate the questers and leave them in the dark literally and metaphorically. Each of these examples leads to the apparent loss of life of a central figure in the battle against evil. In the first instance in the abandoned dwarven Mines of Moria the wizard Gandalf, chief guide of the company of the ring, appears to meet his end. In the second instance in the maze-like entrance to Mordor of Cirith Ungol the ring bearer Frodo suffers an apparently mortal wound. The symbolic 'deaths' (each character eventually revives) associate the maze as emblematic of a mortality contiguous with a place of ecological degradation.

The labyrinth paradigm's duality serves as an apt metaphor through which to explore the confusion about authenticity and direction of progress through its interchangeable use to describe two polar opposite forms. The multicursal maze in *Rings* functions within the labyrinth's unicursal web of life as a cancer. This malady affects the ecological health of the world and should it become too strong has the

capacity to destroy the very life that sustains it. In reprising the image of the maze at points distant in time and space within the quest the maze remains subordinate and fits within the orbit of the recursive unicursal labyrinth and cycle of life.

While the multiplicity of the maze appears to offer various possible futures through the exercise of freewill and choice, *Rings* undermines this in two ways. Firstly it makes the maze contingent on the labyrinth, rather than a separate and independent alternative. Secondly, it constrains the maze within its own destructive structure or cycle. It does this through the recurring themes that coalesce around the two articulations of maze that the text employs as a locus of evil. The similarities of theme as much as physical verisimilitude between these mazes suggest that they originate in the working of the same mind. The maze transfigures Sauron, an otherwise ill-defined and ephemeral presence, physically embodying him in environmental characteristics that encapsulate his choices and their consequences. The subterranean and enclosed maze represents the restrictions of evil and extends these to producing an inhospitable environment devoid of life and pregnant with danger.

In his seminal thesis entitled 'The Structural Study of Myth' Claude Lévi-Strauss argued that while a linear pattern tells the myth, it is through breaking myth down into recurring constituent themes that we come to understand the meaning of the myth.[372] Strauss identified common themes as a comparative measure of intertextuality to identify similarities across different myths.

[372] Claude Lévi-Strauss, The Structural Study of Myth, *The Journal of American Folklore*, 68.270 (1955), p.433.

> First, the question has often been raised why myths, and more generally oral literature, are so much addicted to duplication, triplication, or quadruplication of the same sequence. If our hypotheses are accepted, the answer is obvious: repetition has as its function to make the structure of the myth apparent.[373]

In using a variant of this approach this chapter explores two mazes within the same text. The recurring metaphor of the maze as a wasteland, hostile to nature suggests that it forms a prison of self-destructive replication. The didactic purpose of repetition lies in how it represents essential truths, 'what gives the myth an operative value is that the specific pattern described is everlasting; it explains the present and the past as well as the future.'[374] Through this the eternal nature of Fall appears in *Rings* in microcosm, not as an expression of freedom but subject to its own structure and circumscribed within the unicursal order on which it remains dependent in order to exist.

The markers of similarity depicted through duplication of the maze extend beyond similarities of physical environment. A commonality of themes conspires to contextualise the maze as a recurring location that comprises a challenge to be overcome rather than an opportunity to find an alternative way forward, physically and metaphorically. This chapter identifies and explores the replication of themes in the maze-like environments of Moria and Cirith Ungol and how these fit within the wider narrative. Starting with Moria the chapter focuses on four themes that converge: *Fate; The Mythological Maze; Environmental Contamination; Mutant*

[373] Strauss, Structural Study of Myth, p.443.
[374] Strauss, Structural Study of Myth, p.430.

Creatures. The same headings capture the recurrence of theme at the pass of Cirith Ungol.

An overview of the linear narrative relating to the maze-like Mines of Moria reads as follows. The decision to attempt to progress through Moria proceeds out of necessity, driven ultimately by fate. The company of the ring reluctantly decide to attempt passage after seeing their attempt to cross over a mountain range thwarted due to inclement weather. When their chief counsellor, the wizard Gandalf, proposes passing through the mountains via the Mines of Moria the suggestion provokes dismay due to the evil reputation of the Mines and the uncertainty of passage. Among the company Aragorn prophetically warns of the mortal threat to Gandalf if he attempts the journey. Frodo called to adjudicate determines to follow Gandalf's advice to murmurings of discontent that evaporate as the company become almost immediately subject to pursuit by a wolf pack that forces them in Moria's direction. Crossing a barren landscape, the company eventually locate the hidden ancient entrance to the Mines and effect access. Once inside the maze a rock fall prevents retreat. Gandalf leads the company through the Mines but they disturb the forces of evil in its depths. The company face pursuit and Gandalf, as prophesised, falls into the abyss and sacrifices himself in an attempt to protect the group from attack. The remainder of the company escape back into the outside world and make their way to the haven of the enchanted elven forest of Lothlorien.

The preponderance of prophecy and the insinuation of fate underline the teleological nature of *Rings*. Internally the ring quest essentially realises prophecy about a final conflict in which a halfling (i.e. hobbit) appears alongside the return of a rightful King

of Gondor to overthrow evil. However, if fate were completely fixed then there would be certainty, actions would be prescribed, and freewill compromised. Richard Whitt writes of how the wider mythological aspects of Middle-earth include a Germanic influence that accounts for a distinctive approach to 'fate and doom…where the conceptualization of fate becomes blended with the Christian idea of Divine Providence.'[375] The fate of Middle-earth that leads to intersections with points of decision reflects the fallen nature of the world. It accounts for the labyrinth and the maze as necessary alternatives as William Chase Greene succinctly describes, 'a pair of correlatives, such as good and evil, or sickness and health, or justice and injustice, have significance only in relation to their opposites.'[376] The labyrinth paradigm ably demonstrates this dichotomy as the unicursal and multicursal alternatives are often confused in terminology, while from within the immediacy of the narrative the overall design remains elusive to character and reader alike.

Unicursal labyrinthine fate suggests that there is a fixed cosmological and ecological pattern determined by a higher power, constantly in conflict with and revealed through the presence of a subordinate opposing force. The fate of a fallen world accounts for the presence of the physical maze. Moria expresses through its multicursal labyrinthine form the fate of a people who have lost their way and are driven to self-destruction through over-exploitation of their environment. The subterranean series of passages as barren, dark, dank and ominous, articulate the fragility of the planet and its ability to sustain life. In Moria the dwarves seal their own fate in realising their own selfish desires through creating an extensive and complex

[375] Richard J. Whitt, 'Germanic Fate and Doom in J.R.R. Tolkien's The Silmarillion', *Mythlore*, 29.1/2 (Fall/Winter 2010), 115-129 (p. 115).
[376] William Chase Greene, 'Fate, Good, and Evil in Pre Socratic Philosophy', *Harvard Studies in Classical Philology*, 47 (1936), 85-129 (p. 101).

multiplicity of pathways through which to plunder the earth. The dwarves' bring about their own fate when 'In TA (Third Age) 1980, the Dwarves, while extending their mithril-mine, released the Balrog hidden beneath Barazinbar.'[377] The significance of the dwarves forging an industrial path toward their own destruction leads to an intersection with the Balrog, a fallen spirit from the original rebellion against the ruling power of good. Durin's Bane as an alternative name for the Balrog locates the monster as proceeding from the greed of the king of the dwarves.

Moria comprises an inauspicious location that has wider consequences beyond the fate of the dwarves. The extension and potency of the fate unleashed by the dwarves encompasses the fate of Gandalf, possibly the foremost incarnation of spiritual virtue in the text. In the chapters relating to the journey towards and through Moria fate begins to focus on Gandalf.

The symbolic destruction of the two ancient holly trees that frame the rock face at the entrance to the Mines prefigures Gandalf's fate at the exit of the maze. Symbolically the two images signify that the maze that begins with the destruction of nature ends with the destruction of human figures however powerful they may be. The destruction of these particular trees emphasises the point. Holly as an evergreen symbolises resilience and holds a mythological and religious significance. It was employed as an indication of hospitality in folklore and 'Anciently …hung in churches as a sign of welcome to elves.'[378] At Moria holly serves the same purpose in that it recalls the halcyon days of friendship between dwarves and elves. As a result holly reinforces a sign of long lost harmony sealed in arborial form. Moria's hidden rock

[377] Foster, p.200.
[378] Jobes, Part 1, p. 781.

door requires the reciting of a password. However the company's resident dwarf notes 'But what the word was is not remembered. Narvi and his craft and all his kindred have vanished from the earth.'[379] The key to entry resides within the clue of '*Speak, friend, and enter*.'[380] The eventual realisation that the password literally means 'friend', spoken in elvish, highlights the lack of friendship between dwarves and elves in a fallen world. The symbolic appearance of these words at the entrance to the maze emphasises deviation from harmonious relations. Having evoked a fall from an Edenic state the consequence of this fate for the world intrudes as an omen and premonition of Gandalf's own destruction. Entry to the Mines coincides with an attack by an unnatural creature from the polluted lake beside the Mines. Thwarted in its direct malice toward the company the creature destroys the trees and blocks the entrance with falling rocks.

While Gandalf embodies elevated, spiritual qualities and powers these still leave him far from infallible. His vulnerability has previously been established when tricked and imprisoned. Nevertheless, once inside Moria he proves an unerring guide. He leads the company without once taking a wrong path when the direction of travel becomes unclear. Consequently, he follows a unicursally labyrinthine course, i.e. a single path, not deviating in the face of the many potential alternative passageways. Gandalf leads within Moria in preference to the dwarf Gimli who might have been a more natural choice of guide given his ancestral links to Moria and familiarity with the design of dwarven burrows. While Gandalf has passed Moria once before Gimli's minor role in navigating, although consulted at various points, suggests that the reason for Gandalf's leadership extends beyond clues in the physical landscape. The

[379] Tolkien, *Rings,* p.297.
[380] Tolkien, *Rings*, p.297.

dwarves' in creating the passageways have destroyed harmony as an expression of their moral corruption. In excluding a dwarf, still subject to the same fallen nature that produced the maze, from unpicking the past the text points toward correspondence with the Christian fate of humanity; to be redeemed through the sacrifice of a spiritual being. While the dwarf claims authorship of the maze, the spiritual guide claims the authority of discerning the antidote by identifying a single path that stands as much for the surety of a spiritual compass.

Gandalf displays faith and constancy in the face of fate even in the face of mortal personal threat, fully prepared to make the ultimate sacrifice and accept his own fate in the scheme of a larger, unseen design and to aid the quest. Yet fate operating within the labyrinth dichotomy also depicts the consequences should the maze succeed as the ruling metaphor of ecological design. The catastrophic consequences in the depiction of maze-like environments suggest an environmental Armageddon and the end of the biodiversity that supports life on earth. Gandalf's status of wizard invests him with powers beyond the ordinary, yet of more importance are the significance of his moral values and wisdom. Fate directs him to Moria as a tool in the cosmological scheme. A reminder of this appears in the onomatopoeic description of pursuing drum-beats that echo to a fatalistic refrain of 'doom, doom.'[381] Gandalf's battle with the Balrog, a spiritual force of evil the equal of his own force for good, consequently takes place on a higher plane of consciousness This struggle illustrates as much the strength of essential values as of physical properties and weaponry.

[381] Tolkien, *Rings*, p.320.

When Gandalf apparently falls this vividly demonstrates the strength of the threat to existence posed by the evil represented in this environment. However, the fate that leads through constancy to crisis and death, commemorated in the circuits of the Christian labyrinth also leads to unexpected renewal. Eucatastrophe reveals the triumph of the original pattern of fate in turning the Balrog from Gandalf's destroyer into the means of the wizard acquiring an elevated status on his unexpected return. This status enables Gandalf to overpower his former superior Saruman and take the white robe of the head of the order of wizards.

The maze at Moria finds echoes in Arthurian legend and Christianity. Holly was the emblem of the Green Knight,[382] the antagonist that Sir Gawain must come to terms with in his quest to act as Arthur's champion, enter a place of danger and engage with a supernatural combatant. This Old English poem, famously translated by Tolkien, has attracted ecocritical attention for its engagement with the relationship between the natural world and humanity. Michael George suggests that the poem challenges Lyn White Junior's simplistic critique of medieval Christian society's anthropocentric attitude toward nature. George reads *Sir Gawain and the Green Knight* as depicting binary, and competing, oppositional attitudes about the environment. In George's reading Bertilak, the Green Knight, exhibits limitations on exploitation of nature that ' at least in part conflicts with what White considers to have been the dominant medieval view.'[383] Holly's red berries and thorns also provide a striking signifier in their image red berries and thorns with Christ's passion, self-sacrifice, and subsequent resurrection from a stone tomb. These features are

[382] Tolkien, *Sir Gawain and the Green Knight*, p.23.
[383] Michael W. George, Gawain's Struggle with Ecology: Attitudes toward the Natural World in *Sir Gawain and the Green Knight*, *The Journal of Ecocriticism: A New Journal of Nature, Society and Literature*, 2 (2) July 2010, p.39.

symbolically reprised in Moria, where Gandalf's self- sacrifice ultimately results in his resurrection from Moria's rocky abyss. The eco-labyrinthine environmental subtext of *Rings* itself requires that fate decree that the company are led to confront the perils of the decaying maze of Moria. The book's entire creed identifies the necessity of confronting evil by not turning away and trying to avoid it, even at the utmost personal cost. The ring could have been hidden or lost, as an attempt to postpone, *sine die*, the ultimate struggle. This course of action was considered and dismissed as an evasion of responsibility. Fate plays a major role in this as the fulfilment of prophecy, which itself guides characters to act in the way that they do, consistent with Christ's example.

The destruction of the entrance to Moria immediately leaves the company in the utter darkness of the subterranean maze, a place where nothing will grow, a place of despair. Regret over the loss of the trees recedes as the group focus on their own survival as they begin to encounter uncertain choices in the form of alternative paths. Implicit in these choices is the sense of only one way leading to safety from among the alternatives.

Mythological tropes inform the representation of Moria. Here the environment forms due to the industrial activity of Tolkien's dwarves, who we are told mined the mountains for Mithril silver. Mithril possesses unique qualities of combining lightness with strength, and only exists in Moria. The rarity of Mithril explains its heightened value and the lengths that the dwarves go in order to exploit it. Mithril similarly speaks of unsustainability and finitude. The depiction of dwarves as miners, covetous and greedy has a well-documented history in Northern European

mythology. Tolkien recycles the name Durin, for his king of Moria at its zenith. A dwarf named Durin appears in Sturluson's *Prose Edda* as the second most famous of his kind in Norse mythology. In the same passage Sturluson goes on to recount the names of other dwarves that Tolkien similarly recycles throughout his Middle-earth series.[384] The name Durin also appears for a dwarf in German folklore, as one of a trilogy of powerful dwarf leaders. While skilled in the artifice of manufacturing swords and weapons this skill did not avail their recipient however as 'any weapon (supplied) would ultimately kill its owner.'[385] This history of negativity in representations of the artifice of dwarves highlights duplicitous and self-defeating characteristics of their transformation of materials. The ultimate expression of this negativity appears in the environmental facets of industrialism that make Moria inhospitable.

The dwarves behaviour resembles that of the rebellious angels of Milton's *Paradise Lost* where mining for precious metals originates in hell through the offices of Mammon, 'the least erected spirit that fell from heaven.'[386] Mammon's influence extends beyond that of his peers and by example corrupts 'Men also, (who) by his suggestion taught, Ransacked the centre, and with impious hands; Rifled the bowels of their mother earth; For treasures better hid.'[387] Recycling of mythological elements develops an implicit link between the industrial mines and Christian conceptions of hell. The association of Moria to hell and to the labyrinth paradigm builds as passage through the maze leads toward the climax of this episode of the quest. Gandalf's

[384] Sturluson, p.41.
[385] Theresa Bane, *Encyclopedia of Fairies in World Folklore and Mythology* (Jefferson: McFarland & Company Inc, 2013), p. 115.
[386] Milton, p.169.
[387] Milton, p.169.

staff illuminates the pitch black passageways with 'a faint radiance'[388] and recalls the opening of the Abyss in the Book of Revelation where its author writes that:-

> I saw a star that had fallen from the sky to the earth. The star was given the key to the shaft of the Abyss.
>
> […]he opened the shaft of the abyss; and from the shaft smoke rose like smoke from a great furnace, and the sun and the air were darkened[…]
>
> The rest of mankind who survived these plagues still did not abjure the gods their hands had fashioned, nor cease their worship of devils and of idols made from gold, silver, bronze, stone and wood (Rev:9:1;9:2;9:20)[389]

While in Dante's Inferno, which began with the narrator lost in a dark wood, the protagonist engages in conversation where he notes 'I strayed far off my course through a valley in the radiant life above…' and is answered "If you follow your own star you'll reach your glorious haven without fail."[390]

Tolkien assigns seven rings to the dwarves that enslave them to the malignant ruling ring. The countdown to the final battle within Moria corresponds to identification of the company's exact location within the Mines. Immediately prior to coming under attack Gandalf announces 'I now know where we are…(we) should be on the

[388] Tolkien, *Rings*, p.302.
[389] *The New English Bible* (Great Britain:Collins,1970), pp. 1026-27.
[390] Dante Alighieri, *The Divine Comedy: Volume I Inferno*, trans by Mark Musa (London: Penguin Books, 1984), p. 124.

Seventh Level.'[391] The narrative describes the subsequent desperate flight to seek the only exit six floors below. There are marked similarities in Tolkien's account of the descent to reach the narrow bridge over a ravine spanning an abyss and Dante's *The Divine Comedy, Vol.I: Inferno*. Whereas *Rings* specifically locates the attack on the company at the seventh level of Moria, in Canto XII of *Inferno*, Dante's vision of hell describes how his protagonists 'descend the steep slope into the Seventh Circle by means of a great landslide, which was caused when Christ descended into Hell. At the edge of the abyss is the MINOTAUR, who presides over the circle of the violent.'[392] Dante's assimilation of wider mythology, reimagined for Christianity chimes with Tolkien's views of mythology prefiguring Christian revelation.

As in *Inferno*, the descent in Moria leads from a Seventh Level to a violent confrontation. While both are monstrous the Balrog of *Rings* and the Minotaur also each partly resemble the human form. *Rings* depicts the Balrog initially as 'a dark form, of man-shape maybe, yet greater.'[393] The Balrog presents an inverse image of Gandalf the wizard spirit in human form. The creature resides within and rules the mazy passageways of Moria, a place now inhabited by cave trolls and orcs. These creatures all dwell within the dark, both literally and metaphorically, separate from nature, imprisoned within their own adulterated environment, confined like the minotaur.

Gandalf enters into battle with the Balrog on the narrow bridge that spans the abyss at the exit from Moria. While Gandalf symbolically falls in apparent self-sacrifice,

[391] Tolkien, *Rings*, p.315.
[392] Alighieri, p.176.
[393] Tolkien, *Rings*, p.321.

having led the company through the maze his confederates escape by a narrow bridge in single file, further indicating the single path to salvation. The fight draws in mythology and the supernatural to depict a conflict symbolically spiritual in nature. The battle appears to be fought as much on the astral plane from an account only dimly reported at a later point in the epic. It comprises a struggle between the powers of light and dark, symbolised by Gandalf's later re-emergence where in place of his grey robes he appears clothed in white. In esoteric terms Gandalf has crossed the abyss that spans the gulf between the physical and metaphysical planes of existence. Having appeared to have fallen Gandalf's unexpected return makes clear that he remains for a considerable time disoriented by the experience of conquering the maze.

The effect of Moria as a locus of evil extends beyond its borders and affects the surrounding environment. Through this we begin to see the maze as the conduit to ecological disorder. The companions number amongst them members who hold personal, historical, or folk memories, of the environs of Moria. The group anticipate locating Moria by identifying as a primary marker a noisy stream running through a verdant landscape. The living stream runs beside the location of the single path that constitutes 'The only road of old to Moria.'[394] However in place of the stream they encounter 'a barren country of red stones... All was bleak and dry. Their hearts sank. They saw no living thing.'[395] The effect combines a concurrent feeling of loss and being lost. The disturbing absence of flora and fauna fundamentally suggests an existential crisis. A crisis figuratively attuned to an eco-labyrinthine reading through the concomitant erasure of a single path inextricably linked with a life-affirming

[394] Tolkien, *Rings*, p.292.
[395] Tolkien, *Rings*, p.292.

stream. The ecology of the land has been obliterated. In this wasteland the questers search desperately for traces of the path/stream. The erasure of the natural landscape and the consequent loss of a guide to direct progress becomes clear when the company finally arrive at Moria. Standing adjacent to the entrance of old to the Dwarves Kingdom a dam restrains the Sirannon stream and harnesses it in Heideggerian terms as standing-reserve.

The lake formed from the damming of the stream dominates the scene where the stillness of the water stands as a contrast to the joyous life of the dancing stream contained to create it. Tolkien depicts the dam at Moria as alive in an inauthentic and corrupted sense. It possesses a malicious consciousness with its characteristics anthropomorphised to reveal its origins; 'a narrow creek barred their way. It was green and stagnant, thrust out like an arm towards the enclosing hills.'[396] Layer upon layer of negative environmental associations build as, 'under the weedy pools were sliding and greasy stones, and footing was treacherous. Frodo shuddered with disgust at the touch of the dark unclean water on his feet.'[397] The lifeless, unclean water paints a picture of death and corruption. Through its transformation the water has become undrinkable and the company are warned that this will be the case within the Mines too, suggesting that the lake is formed in part from outflows from Moria.

While unexplained the reason for the dam at Moria can be inferred as proceeding from the industrial mining activity of the dwarves. The green algal blooms described in the text are consistent with nutrient pollution and mining contaminants. Water was

[396] Tolkien, *Rings*, p.294.
[397] Tolkien, *Rings*, p.294.

typically used in mining during the industrial revolution. It was used as both a source of power, to drive mill-wheels to power machinery and pumps to prevent flooding of underground passages, and for washing the ore and removing impurities. Within Moria a particularly treacherous section of path that encompasses gulfs above and sheer falls to the depths below comes replete with industrial imagery; 'The noise of churning water came up from far below, as if some great mill-wheel was turning in the depths.'[398] The artificial lake can be accounted for in the methodology employed to contain polluted waste by-products of mining. Hard rock metal mining involves the extraction of ore which is bound up with sulphide compounds. In exposing the latter, known as 'tailings', to air and water these compounds produce sulphuric acid which pollute watercourses. The acidity also causes metals and chemicals in surrounding rock to leech into the environment. Treatment of mining waste often involves building tailings dams to dilute acidity. Modern tailings dams require an on-going monitoring involving checks on the movement of contaminated groundwater and the entire process 'creates very long-term environmental liabilities which future generations must manage.'[399] En-route to Moria the company encounter the dried up stream bed that marks the way, where the rocks are stained red and brown. The depiction of this pigmentation suggests staining from the oxidisation of ferrous iron in mine water. Such pollution in streams and rivers coats the stream bed, and reduces light and oxygen levels destroying eco-systems and reducing biodiversity.[400] The presence of a tailings dam would suggest that the dwarves may have become conscious of the

[398] Tolkien, *Rings*, p.303.
[399] David Coil, Elizabeth Lester, Bretwood Higman and Andrew Mattox, *Mine Tailings* (2010) <http://www.groundtruthtrekking.org/Issues/MetalsMining/MineTailings.html#ixzz4IE9qKD6x> [accessed 24 August 2016].
[400] Mining, pigment and ochre water (2012) <http://www.cleanriverstrust.co.uk/mining-pigment-and-ochre-waters/> [accessed 7 December 2016].

harm that mining discharge was causing when it went into the brook. The longevity of the environmental threat extends beyond the generation of dwarves who occupied the site.

Tolkien would have been well aware of the legacy of mining. His formative years were spent in Birmingham, which lies next to an area known as the Black Country, a heavily mined industrial region whose name was coined due to the smoke that filled the air. Mining in the Black Country was however confined to coal. An alternative inspiration for Moria might be located in Cornwall, a region of England with a history of metal mining where Tolkien took an extended vacation in 1914.

While the Balrog has a history and identity as a fallen spirit in the wider cosmology of Middle-earth, as 'Maiar who rebelled with Melkor after Sauron the mightiest and most terrible of his servants'[401] the dam's sentinel, the Watcher in the Water has uncertain origins. This destroyer of the ancient holly trees at Moria's gate appears to be independent of the subversion of creation by the chief instigators of evil in Tolkien's Third Age of Middle-earth; Sauron and Saruman. We might infer that its existence arises as an inadvertent result of the dwarves mining and contamination of the environment. As such the mutation identifies industrialism as producing its own, unexpected, malignant forces. As a hint of the creature's evil intent the text draws attention to its focus on the ring-bearer, although this might be explicable outside of the bounds of mythological good and evil in Middle-earth. An independently arising malign force may be naturally attracted toward the emanations of evil emitted by the ring or inordinately susceptible to the influence of the forces of evil attempting to

[401] Foster, p.31.

separate the ring from the company. As recounted earlier in consideration of Old Man Willow, the rotten animated tree twisted in its hatred of those who cut down the forests, *Rings* includes a special category of malevolence external to the power of the ring and not linked to its continuance. The inference that the many-tentacled Watcher in the Water owes its existence or mutation to industrial pollution, and its size and strength, indicates that it finds the polluted lake conducive to its survival. As a wretched by-product of the dwarves activity, like Old Man Willow (and indeed the minotaur) we interpret the creature as a victim tied to and trapped within a particular place.

In the case of Old Man Willow a rationale accounts for his corruption that identifies his transformation as a by-product of environmental conflict. As an inversion of the virtuous and learned Bombadil the genius loci who lives next to the labyrinthine old forest, the Lake Monster serves as the genius loci of the contaminated lake that abuts the maze of the mine. Tolkien appears to recognise a moral dilemma in the origins of the creature. Rather than explicitly assuring the Lake Monster's demise the text leaves open the possibility that it survives the defensive sword strokes that ward off its attack. Each of these cases infers a responsibility for the disharmony that accounts for and to some extent condones the existence of an unnatural threat. While hobbit population dynamics account for disharmony on the borders of the Old Forest, the dwarven over-exploitation and pollution created in their mining operations causes disharmony in the environs of Moria. This distinction might account for the decision not to assure the creature's destruction. Similar sentiments have informed the protection of adulterated eco-systems as Sites of Special Scientific Interest. These sites may lack the previous bio-diversity that reflects ecological health, but

they are places whose development has led to the evolution and survival of rare specialist creatures whose survival is linked to the specific habitat. Among the examples of such sites is the abandoned copper mine of Mynydd Parys (Parys Mountain) SSSI in Anglesey.[402]

While the Watcher exists on the fringes of Moria, the Mines themselves are home to the inauthentic orcs; a corrupted, genetically-modified, lifeform bent entirely towards evil. Their presence in the tunnels exploits the fallen culture that gave rise to their construction. Whereas the dwarves ostensibly built a magnificent edifice in Moria they undermined its foundations though greed. The proliferation of tunnels illustrates the increasing complexity and extent of their exploitation. This exploitation both unsustainable and environmentally degrading leads to its occupation by orcs that appear happiest living in squalor. The text suggests that all environmentally-degraded spaces are matched by the characteristics of those who enjoy living in them.

Phantom fauna also plays a part in directing the company to Moria. While the barren landscape for miles around appears unsupportive and devoid of life, it harbours the supernatural wolves that attack the company and drive them towards the mines. The inclusion of a wolf attack bears the hallmarks of a well-worn tradition in fairy stories and mythology that marks the wolf as gratuitously malicious and evil. *Rings* distinguishes the targeted attack as a manifestation of faerie that avoids the stereotypical denigration of wolves by introducing its supernatural variant of the

[402] Danielle Sinnett, 'Going to waste? The potential impacts on nature conservation and cultural heritage from resource recovery on former mineral extraction sites in England and Wales', *Journal of Environmental Planning and Management*, 62:7 (2019), pp. 1227-1248.

‘Warg’. The phantom Warg’s presence at this point fits into the wider ecological aspects of the environment through which they are passing. The company’s disorientation, a common feature of the Maze, begins in diluted form many miles from the Mines themselves. The warg rather than the wolf acts as the direct agent and representative of the power of evil; their distance from wolves illustrated in their evaporation on being killed. This important distinction invites reflection on fact and fiction, and challenges the morality, justification and fears behind hunting wolves; a rationale that led to their extinction in the British Isles.

The recursive loops of the labyrinth metaphorically delineate its patient and penitential journey toward revelation. The contemplative introspection of the divine pattern invites us to accept our place within the scheme of the unicursal life-affirming labyrinth. Within this repeating scheme the maze appears as a test that reflects the difficulty of maintaining progress along the right path. Subsequent to emerging from the maze at Moria the labyrinthine journey continues through many twists and turns, which eventually lead to its characteristic repetition of themes, including arrival at another maze that articulates mortal threat. At the very precipice of entering Mordor, the locus of evil and site of the volcano that provides the sole way of destroying the ring stands Cirith Ungol. There are a number of striking structural, narrative and mythological parallels between events at Ungol and the account of Moria and its aftermath.

A linear synopsis of the plot finds the hobbits, Frodo and Sam, guided to Ungol by a corrupted, duplicitous guide in Gollum. The villainous Gollum comprises a fallen creature of pseudo-hobbit ancestry, former custodian of the corrupting ring of power.

Gollum remains emotionally addicted to the ring and obsessed with regaining possession of it. Gollum, also known by his original name Smeagol, remains torn between two rival influences; the ring and the remnants of his original conscience. In leading them to Ungol the former takes possession of him as he directs them into a maze through the mountains that guard Mordor, the land of evil.

The passage itself involves negotiating a series of tunnels through the mountain. Once within the tunnels Gollum abandons the hobbits and it transpires that he has lured them into a trap. The tunnels are the home of a mutant spider to whom Gollum in Cretan-fashion offers the hobbits as a sacrifice. Gollum intends to retrieve the ring after the spider has consumed its current bearer Frodo. The spider attacks Frodo and, as in Moria, the immediate account appears to depict his death. Frodo's companion Sam retrieves the ring and abandons Frodo's body before discovering too late that Frodo is merely unconscious as Orcs carry him off to a guard tower. Sam uses the ring's power of invisibility to rescue Frodo, and they proceed with the quest having passed through Ungol into Mordor in the culmination of the ring epic.

Inauspicious portents of danger appear in the approaches to Ungol. The wheel of fate seems to be dictating a strikingly similar series of themes as those encountered at Moria and in its aftermath. The narrative gives the impression of being inexorably sucked into reverse. Themes and images developed immediately post-Moria, when the company subsequently arrive at Lorien, now re-appear as a prelude to being drawn back into this second articulation of evil and fatality in a maze-like environment. The recurrence that draws the narrative back into the maze at this penultimate stage illustrates the iterative narrative structure. However, whereas

Moria represented struggle on the spiritual plane through Gandalf's battle with the Balrog, Ungol presents the same life and death challenge grounded in Middle-earth, tackled by the everyday, diminutive, folk of Tolkien's Shire.

The recurring elements and parallels unfold as Frodo and Sam, briefly separated from their guide Gollum, encounter Faramir, a captain of Gondor and son of its Steward, and his troop. Just as post-Moria the original company lacking their guide, Gandalf, encounter elven guards of Lorien who insist they go blindfold, so now Frodo and Sam are required to have their eyes covered as they are led to a secret cave hidden behind a waterfall. The text acknowledges the verisimilitude as Frodo recalls the earlier episode at Lorien in conversation with Faramir. Their guide to this point, Gollum, an inverse image of the benevolent Gandalf, was not present when Frodo and Sam met Faramir. This detail fits with the sense of the narrative going into reverse. This reversal now finds Frodo regaining rather than losing a guide when Gollum reappears having located the pool at Henneth Annun next to the waterfall. This pool itself represents a sacred place under the watchfulness of Faramir in the same way as the elves protect the sacred Lorien. In allowing Frodo to continue with the quest and entrusting him to Gollum as guide, Faramir as a lesser scion of Gondor inversely reprises Aragorn's role after Gandalf's fall. Whereas Aragorn (the king in exile) takes over responsibility for leadership on Gandalf's fall, Faramir, the son of the Steward naturally relinquishes the opportunity to take authority. In so-doing Faramir reveals himself more virtuous and deserving than his elder brother Boromir who fell due to his desire to secure the ring for himself. Faramir does so in the acknowledgement that the ring's power cannot be brought under control. At the time he makes the decision to risk all in an attempt to destroy illicit power he stands

within a natural sacred place that he has vowed to protect. The sacrifice of the ring appears contiguous with these vows and underlines the ecological imperative of the quest.

Faramir, as a lesser seer, expresses warnings based as much on common-sense as on foresight. He learns that Gollum has chosen to lead the hobbits toward Mordor through Ungol, having led them past an alternative entrance that like the mountain pass before at Moria was too difficult to attempt. Faramir pre-warns Frodo that he foresees Ungol as the location of the hobbit's doom; 'I would not have you go to death or torment. And I do not think that Mithrandir (Gandalf) would have chosen this way.'[403] This warning echoes Aragorn's prophecy to Gandalf about his fate should he attempt Moria. Gandalf's dismay when he later discovers that Frodo was bound for Ungol, guided by Gollum is tempered by his belief that fate and an overall design may have willed the journey; 'Treachery, treachery I fear; treachery of that miserable creature. But so it must be. Let us remember that a traitor may betray himself and do good that he does not intend.'[404]

Whereas Gandalf led the company into Moria with the good intentions of proceeding to the safe haven of the enchanted woodland of Lothlorien, Gollum inversely inspired now leads Frodo with evil intentions toward Ungol which in turn provides entrance to the centre of evil in the land of Mordor. Faramir articulates virtue by reprising elements that have been previously exhibited by other characters associated as virtuous; Gandalf (wisdom to think before he acts, sparing Gollum), Aragorn (rejects desire of the ring, seeks to focus on the duty of defending Minas Tirith) and Galadriel

[403] Tolkien, *Rings*, p.677.
[404] Tolkien, *Rings*, p.797.

(parallels to her role as host at Lorien). On parting from the hobbits, like Galadriel before him, Faramir provides the travellers with victuals and climbing implements. The text further recalls the point of entry to Lorien in the manner of exit from the protected glade. In the latter Gollum's eyes are bound, rather needlessly as he has already found the way to the pool, in the same way that Gimli the dwarf was required to go blindfold by the elves into Lorien. Frodo having learnt from the earlier experience insists that as before all members of his party should be similarly treated. In each instance Tolkien presents environments that link nature and virtuous counsel but which are hidden. Access to and from such places involves relinquishing the idea of being in control and reflects the distrust of characters who function as proxy-humans. In environmental terms the questers now leave a natural place of safety and sanctity, with abundant food, which provides a stark contrast to the degraded industrial wasteland of Ungol. The location the hobbits leave, Henneth Annun, translates as 'the Window of Sunset'[405] a representation both of fate and a fitting prelude to a metaphorical journey into the dark.

The maze at Ungol functions like a vortex of fate. The focus in Ungol shifts from the guide onto those who are led. The change in emphasis highlights that fate not only uses the great and the good to fulfil its purposes but also challenges little people, who ultimately have the power to engineer change. Personal fate also reflects inevitability associated with character traits. The monstrous spider Shelob's fate exploits her gluttony and selfishness. Gollum's demise as the hopeless ring addict links fate to the lack of freewill incumbent in the desire to hold onto an unsustainable source of power that has corrupted, weakened and reduced him over an extended

[405] Foster, p.193.

period. Yet Gollum's redemptive fate is to guide Frodo and ultimately to fulfil albeit unwittingly the fate of the quest itself.

Wayne Hammond and Christina Scull's research on Tolkien's notes and drawings confirm that Tolkien was acutely concerned about the difficulty of making Frodo and Sam's entrance into Mordor appear credible.[406] Hammond and Scull relate how credibility was more than sustaining a sense of realism. Credibility extended to maintaining consistencies of geography, history, and the timing of events. Among the temporal aspects the chronology of events was important in order to synchronise the narrative of the ring's destruction to parallel Christian identification of the date which marks both the annunciation and resurrection of Christ. Christopher Tolkien clearly demonstrates in his review of his father's drafts of *Rings* the care taken over the measurement of time. Often the temporal guide employed in the text refers to cosmological markers of time, i.e. in the phases of the moon.[407]

A labyrinthine component emerges in the strength of associations with the narrative going into reverse or turning back on itself. This reflective aspect reminds us of the earlier episodes of the quest as providing resources and knowledge that equips the present with the means to facilitate the conclusion of the quest. These elements counteract the inversion of progress found in the vortex's pull toward the multicursal maze. The reversal in direction represents an inversion of order that has echoes in Old English folklore, where *The Childe Rowland* describes traversing a turf labyrinth against the course of the sun, or 'widdershins', in order to facilitate entry to an evil

[406] Wayne Hammond and Christina Scull, *The Art of The Lord of the Rings by J.R.R. Tolkien* (London: Harper Collins, 2015), p. 117.
[407] J.R.R. Tolkien, *The History of The Lord of the Rings Part Two: The Treason of Isengard*, ed. by Christopher Tolkien (London: Harper Collins, 1993), p. 367.

underworld.[408] On arrival at Ungol the hobbits become aware almost immediately, despite the darkness, of side passages opening on either side of the main tunnel. Nevertheless progress within the maze is at first obvious and they make headway. Eventually, beyond the point of no return, sacrificed to their fate by their duplicitous guide, the hobbits arrive at a junction where a choice needs to be made. Here a wrong-turn could be fatal. Having travelled a distance to reach this point the hobbits are left stranded and disorientated, their faith in being able to navigate through the maze shattered. This not only serves the plot, it figuratively warns through the eco-labyrinthine aspect against the danger of entrapment in a complex and barren environment. At this point cognitive ability fails to offer a solution to the problem nor does the power of the ring. Salvation comes through reference to the alternative values embodied by spiritual entities encountered earlier. Sam's thoughts turn to Tom Bombadil, the spirit of the natural world, and from this his mind recalls that they carry with them the light of heaven in the form of the elven star glass of the Lady Galadriel. Frodo, like Theseus before him, thus carries a gift from a powerful female character to assist him within the maze. Galadriel stands proxy for Ariadne, however the elven queen's gift fittingly embodies assistance from a higher plane external to earthly mazes and tied instead to the divinely ordered cosmos. By contrast the thread that the earthly Ariadne had provided to guide Theseus from the maze transforms in revision into the web of a mutant female spider seeking the hobbits destruction. Through her location in the maze, Shelob the spider takes on the role of the Minotaur as a corrupted creature feared, loathed, unnatural and unconsciously the tool of the real villain the Dark Lord, who allows her to guard this flank of his

[408] Jacobs, 'Childe Rowland', p. 191.

kingdom. Frodo and Sam take on the aspect of the sacrificial tribute paid to the minotaur.

The hobbits derive their strength to resist Shelob from a single source of concentrated light that encapsulates the heavens as a means of steering their course. With this light of true unerring order the many-eyed Shelob is dazzled; no matter how many alternative lenses on the world she possesses. Accompanying the light of this icon, words of power in an archaic and alien language come freely to the hobbits lips. The light provides a temporary respite for Frodo but he proceeds wildly, without caution and remains trapped within the confines of the malevolent maze. When he eventually manages by force and physical exertion to free himself from Shelob's webs he is taken unawares by the spider.

The journey that had led towards Ungol and the encounter with Shelob has parallels with the depiction of the environs of Moria in illustrating the leakage of environmental degradation whenever natural boundaries are breached. On leaving the environmental sanctuary of Henneth Annun, the hobbits' approach to Cirith Ungol, and its maze of Torech Ungol, led them to a final outpost of nature. Symbolically we encounter a belt of trees standing defiant in relief against the harshness of the land beyond. The trees marking the final boundary 'stood in a great roofless ring, open in the middle to the sombre sky…In the very centre four ways met.'[409] The trees are evidently ancient, however their upper branches, i.e. latest growth, betrays their perilous position within the temporal and geographical context of the plot; 'their tops

[409] Tolkien, *Rings*, p.686.

were gaunt and broken, as if tempest and lightning blast had swept across them, but had failed to kill them or to shake their fathomless roots.'[410]

Circling the crossroads this ring of trees embossed by the cross of roads provides particularly potent imagery. It embosses this physical junction where roads lead toward lands of both good and evil with the cross in conjunction with the resilience of nature that together sanctifies the trees. Their longevity founded on deep roots sunk into the earth itself. In addition the symmetry of tree, circle and cross overlay the narrative with an implicitly eco- labyrinthine flavour. Tolkien goes on to make explicit the ecological nature of the struggle through an exchange between the hobbits. Frodo we are told while filled with foreboding and fear suddenly notices the face of Sam beside him illuminated by sunlight through the trees. The sunset in the distance also briefly lights up the decapitated stone statue of an ancient king. In the place of its head a rock roughly painted with the symbol of evil, the Red Eye is set. It stands for the degradation of humanity and its subjugation. The redness of the eye speaks of pain, anger and hostility the imprint of Sauron its master. Yet the image transforms into a sign of hope as 'Suddenly, caught by the level beams, Frodo saw the old king's head…'Look, Sam!' he cried, startled into speech. 'Look the king has got a crown again!'[411] The coronation forms out of the redemptive framing of the head by flowers of silver, gold and of white stars. It leads Frodo to state 'They cannot conquer for ever!'…And then suddenly the brief glimpse was gone. The Sun dipped and vanished, and as if at the shuttering of a lamp, black night fell'.[412]

[410] Tolkien, *Rings,* p.686.
[411] Tolkien, *Rings*, p.687.
[412] Tolkien, *Rings*, p.687.

The companions move with reluctance as they realise they are now taking the final road 'out into the darkness of the East.'[413] Beyond the cross(roads) of the wood, the environment reflects the evil of the Dark Lord, the usurper of the natural order. Alongside the scars on the landscape and the barren wastelands evil appears in repeated references to the corruption of authentic nature; the light of the moon appears hazy and unnatural; luminous flowers bloom and give off the smell of corruption of dead bodies; a bridge spans a stream whose waters appear to boil and steam but whose vapours are deathly cold, while the bridge itself bears misshapen carvings of men and beasts.[414] The ersatz neon light of the flowers, the stench of death, the air pollution that obscures vision and the mutation of form are all overshadowed by the ominous distant presence of the guard tower, whose 'windows showed, like countless black holes looking inward into emptiness.'[415] The inward looking windows focus the reader's mind on the source of contamination and its vacuous qualities, and the many rooms within that themselves resemble a maze of disorder.

The guard tower's usefulness in protecting the Dark Lord's kingdom inverts its original purpose. Cirith Ungol's tower was imagined as historically conceived and built by men born out of a desire to contain and protect against evil. Instead it provides a reservoir of corruption leaking beyond the parameters within which it was supposed to be confined. The final approach to the maze of tunnels of Torech Ungol (Shelob's Lair) involves an arduous ascent of two staircases cut into the mountains. The hobbits are able to discern 'the topmost ridge, narrow, deep-cloven between two

[413] Tolkien, *Rings*, p.688.
[414] Tolkien, *Rings*, p.689.
[415] Tolkien, *Rings*, p.688.

black shoulders; and on either side was a horn of stone.'[416] The twin horns accentuate the Satanic quality of the environment with its barren ecology. One of these two horns is the black tower, the gateway to Mordor. Here at the very precipice of Mordor Tolkien comments specifically on sustainability. Frodo and Sam speak about the need to conserve their water supplies. The hobbits recall the warning of Faramir against drinking water and how this applies to water that is flowing out of Mordor rather than into it. A somewhat superfluous observation as Sam has prefaced this discussion by noting that 'there isn't any water up here: not a sound or a trickle have I heard.'[417]

Arriving at the tunnel entrance to Torech Ungol, morning has notionally broken yet 'the heavy sky above was less utterly black, more like a great roof of smoke.'[418] At the same time the cave mouth to the tunnel emits 'a foul reek, as if filth unnameable were piled and hoarded in the dark within.'[419] The smell seems stronger than the pungent aroma of the unearthly, luminous flowers while the depiction of the darkness suggests it lies deeper here even than in Moria.[420] The mention of Moria continues the theme of recurrence and comparison between Lothlorien/Moria and Henneth Annun/Cirith Ungol. The sense that they are now nearing the heart of evil magnifies, the decay elsewhere being a shadow of what they are about to encounter.

While the ultimate symbol of evil in environmental form, the maze of Ungol projects an illusory image of power. In size far less than Moria which took days to cross, the

[416] Tolkien, *Rings*, p.695.
[417] Tolkien, *Rings*, p.696.
[418] Tolkien, *Rings*, p.701.
[419] Tolkien, *Rings*, p.701.
[420] Tolkien, *Rings*, p.701.

danger lies in its intensity and in part through the feelings it evokes. The darkness within the maze has a quality that once 'breathed brought blindness not only to the eyes but to the mind, so that even the memory of colours and of forms and of any light faded out of thought.'[421] The environment has a negative, debasing effect too upon their guide, Gollum, in his struggle between his good and bad sides. The inhalation of darkness and the mood change of Gollum suggests that the maze functions as a mind-altering drug.

In the approaches to, and precincts of, Cirith Ungol, the mutations to flora and fauna are a marker of change as corruption of authentic nature. The ghostly, phantom, irridescent flowers that reek of rotting flesh illustrate that while degraded conditions may harbour life, the life that they support reflects the iniquitous conditions rather than alleviating them. The same effect appears in relation to Gollum whose 'eyes shone with a green-white light, reflecting the noisome Morgul-sheen perhaps, or kindled by some answering mood within.'[422] The emanations from the maze as the locus of degradation threaten to overwrite the labyrinthine pattern of nature. The maze offers an illusion of independence from the original form without being able to truly create only adulterate and corrupt. As Frodo confidently states here of the orcs, 'The Shadow that bred them can only mock, it cannot make: not new real things of its own. I don't think it gave life to the orcs, it only ruined them and twisted them; and if they are to live at all, they have to live like other living creatures. Foul waters and foul meats they'll take, if they can get no better, but not poison.'[423] The description of

[421] Tolkien, *Rings*, p.702.
[422] Tolkien, *Rings*, p.689.
[423] Tolkien, *Rings*, p.893.

the Dark Lord's power as a shadow underlines how he offers an illusion that mars and conceals rather than reveals an alternative truth.

Shelob as the counterpart of the Balrog and pseudo-minotaur evokes the sense of mutation through her size. Wider Middle-earth cosmology identifies her as the last child of Ungoliant, co-conspirator and destroyer of the trees of Valinor in The Silmarillion. Tolkien takes care to represent Shelob as taking the form of a spider, in much the same way that he distinguished between authentic and phantom wolves on the approach to Moria.

Strauss's structural theories maintain that while myth typically proposes to deal with events of long-ago its 'operative value is that the specific pattern described is everlasting; it explains the present and the past as well as the future.'[424] The recurrence of challenges across time and place, encompassing the strong and mighty and the weak and ordinary infers that the same themes can be extended beyond the text and assimilated by readers in their own engagement with the world around them.

The reiteration of consequences and the environments and paradigms within which they are set serve a didactic purpose. The recurring focus on the maze as a place of death acts as a physical substitute for describing the figure of Sauron himself. Indeed the maze represents Sauron's transformative powers as misleading, corrupting, and betraying a structural emptiness of meaning and direction. The

[424] Strauss, 'Structural Study of Myth', p. 430.

figurative aspect consistently depicts evil as the antithesis of pattern and order in the natural world/cosmos.

This chapter illustrates how *Rings* personifies evil through maze-like environments. These mazes represent the error and hubris of their creators, and provide a continuing, disorienting challenge for the quest. The maze overwrites and problematizes attempts to follow the singular redemptive path that reflects a cosmologically cyclical pattern. Read alongside the preceding chapter on the unicursal quest the evidence points toward an ecological labyrinthine dynamic at the heart of *Rings*. The following two chapters look for corresponding evidence of labyrinthine structure to shine a light on the ecological orientation of Pullman's *Materials* trilogy. *Materials* promises to invert the labyrinthine reading of ecology in *Rings* through legitimizing the maze as an authentic ecological cipher. Pullman's text is illustrative of contemporary society's rejection of the legitimacy of a divinely ordered world. The contrast between ecocritical orientation in the two texts reveals the versatility of an eco-labyrinthine reading.

Chapter Seven

Pullman's Deep Dark Maze: Between Worlds and Within Worlds

> Chance governs all. Into this wild Abyss
> The womb of Nature, and perhaps her grave
> Of neither sea, nor shore, nor air, nor fire,
> But all these in their pregnant causes mixed
> Confusedly, and which thus must ever fight,
> Unless the Almighty Maker them ordain
> His dark materials to create more worlds,
> Into this wild Abyss the wary Fiend
> Stood on the brink of Hell and looked a while,
> Pondering his voyage; for no narrow frith
> He had to cross.[425]
> John Milton, *Paradise Lost*, II.910-916.

In lending the phrase 'His dark materials' for the title of his trilogy Pullman pays homage to *Paradise Lost*, John Milton's national epic poem of Christian Fall mythology. In its overt reference against Milton the title foregrounds Pullman's sub-creation of multiple worlds. These myriad alternatives present through their variety a repudiation of a single, fixed, authentic relationship ordering creation.

This chapter illustrates how the symbolism of the maze establishes ecological authenticity based on evolutionary principles of change and adaptation. The quest

[425] Milton, p.196

hero validates the maze by utilising the pathways it provides to understand the structure of authentic nature, and act in line with its principles to protect it. Through its potential pathways the maze identifies alternative futures, and facilitates dissent from restrictive ideas and centralised control. The quest hero encounters the maze unconsciously albeit apparently attracted toward it as part of a teleology leading to the inversion of Fall mythology. Recognising the maze as an authentic structure for ecology allows us to look at the choices and examples to which Pullman puts it, and their ecological implications.

Materials subverts the Christian Fall through inversion. The text celebrates the advent of consciousness through the acquisition of illicit knowledge. The narrative establishes a new teleology through the fulfilment of mythological portents that anticipate an evolutionary trajectory. An unconscious quest emerges that proceeds through a maze of possibilities, choices and imaginative threads which separate, lead back to one another, or comprise dead-ends. The maze-like journey symbolises the struggle against constraint within psychological and physical boundaries.

The joint quest heroes reprise the roles of Adam and Eve. Rather than beginning in an authentically pure Eden, Will and Lyra originate in alternative versions of England distant in time and space, brought together by the opening of passageways between worlds. These worlds are each constrained by a belief system that regards new knowledge as a potential threat to order. Lyra's fantastic, steampunk, pseudo-nineteenth-century England provides an alternative past against which to gauge the actual development of Will's prosaic, late twentieth-century England. Each of these alternative worlds are linked by the spread of ecological crises that provides an

existential threat to intelligent life. The heroes unconsciously embark upon a quest laid out in prophecy to bring about a second, redemptive fall. This fall will challenge prescriptive and limiting ideas about authentic nature as fixed and sacred. It involves the death of the figure of God, who represents illegitimate power as sole creative force. Each on the cusp of puberty their quest journey ranges across a number of different worlds before it concludes by returning Lyra and Will to their respective versions of Oxford. Their journey through the maze of worlds provides lessons about authenticity and knowledge to address ecological crises.

As the trilogy progresses the narrative becomes increasingly complex as it negotiates passage within worlds and across a series of environments. In the first instalment, *Northern Lights*, the action begins in the nineteenth-century steampunk world of Lyra, passing between its versions of Oxford, London, the Fens and the North Pole, culminating at the end with a passage made to another world. The second instalment *The Subtle Knife* begins by introducing Will in an apparently prosaic twentieth-century England. He moves from Winchester to Oxford, before finding an intersection with a third world, the spectre-filled city of Cittagazze, where he meets Lyra. The narrative proceeds to cross back and forth across these three worlds, either in response to the progress of Will and Lyra, or to account for action simultaneously taking place in each world. In the final instalment *The Amber Spyglass*, complexity increases still further as the narrative draws toward its denouement. Passageways are cut between numerous worlds, some of which are narrative or physical dead-ends. Locations include: the abodes of Asriel (the equivalent of Satan) and God as the two sides in conflict; the land of the dead/purgatory; a beach in an unknown world; the world of the Mulefas (an

intelligent mammalian lifeform); and various locations across the three worlds already encountered. At times it is not readily apparent which world we are in as readers. The ultimate direction of the protagonists quest also remains uncertain throughout and goes through a process of 'becoming' as a result of chance, choice and fate. The narrative fits together as a maze through space and time, joining places through what Bakhtin describes as a chronotopic process.

> In the literary artistic chronotope, spatial and temporal indicators are fused into one carefully thought-out, concrete whole. Time, as it were, thickens, takes on flesh, becomes artistically visible; likewise space becomes charged and responsive to the movements of time, plot and history.[426]

Timo Muller explains how in ecological terms Bakhtin's chronotope can present a 'preference for …"historical" over "natural time", that is, for the notion of human progress over the cyclical and recursive temporality of the non-human world'[427] sentiments evident in Bakhtin's suggestion that 'cyclicity, is a negative feature…Time's forward impulse is limited by the cycle. For this reason even growth does not achieve an authentic "becoming."'[428]

The alternative versions of Oxford produce a pseudo-historical, or mythological, bridge between the potential in the past and contemporary England. Stephanie

[426] M.M. Bakhtin, 'Forms Of Time And The Chronotope In The Novel', in *The Dialogic Imagination by M.M. Bakhtin*, ed. by Michael Holquist, trans. by Caryl Emerson and Michael Holquist (Austin: University of Texas Press, 1981), 84-258 (p. 84)
[427] Timo Muller, 'The Ecology of Literary Chronotopes', in *Handbook of Ecocriticism and Cultural Ecology*, ed. by Hubert Zapf (Berlin: de Gruyter, 2016), 590-604 (p. 598)
[428] Bakhtin, pp.209-210.

Pincetl notes that in political ecology cities present 'the most explicit locations for understanding the 'succession of stages…that 'constitute the "human history of nature"'[429] and provide evidence of 'the co-evolution of society and nature.'[430] Societies produce different models through which we can compare the direction of such co-evolution.

The nature of change and progress cuts through *Materials*. While its alternative versions of Oxford share many identical buildings this serves to highlight the changes between the romantic past and the present day. When Lyra visits Will's future version of Oxford it invites us to question the direction of progress and the world we have created, through Lyra's confusion and amazement.

> Lyra was looking for somewhere quiet…In her own Oxford there would have been a dozen places within five minutes' walk, but this Oxford was so disconcertingly different, with patches of poignant familiarity right next to the downright outlandish: why had they painted those yellow lines on the road? What were those little white patches dotting every pavement (in her own world, they had never heard of chewing gum).[431]

The strength of association between Lyra and Will's worlds appears when Lyra reaches a familiar, shared landmark and discovers identical graffiti on a 'particular worn stone …there were the initials… scratched, the very same ones! She'd seen

[429] Stephanie Pincetl, 'The Political Ecology of Green Spaces in the City and Linkages to the Countryside', *Local Environment*, 12.2 (2007), 87-92 (p. 88).
[430] Pincetl, p.88.
[431] Pullman, *Subtle Knife,* p. 77.

him do it! Someone in this world with the same initials must have…done exactly the same.'[432] In each case humanity leaves a mark upon the world as an expression of human nature. The rival Oxfords develop separately but through the same creative impulses and expressions. The text reveals an understanding of place as an overwriting, a palimpsest, just as the text overwrites religious cosmology, national history and literature to create a new myth.

The worlds of *Materials* are universally dystopian and engaged in a struggle over the course of the future. Adult figures are unable to see beyond the narrow bounds of culturally constructed configurations of their world. *Materials* illustrates this through Lyra's world where each human has an animal double, a daemon, that constantly changes animal form up until puberty when they become fixed in line with a person's character. The visual clue reflects the link between innocence and experience. The natural, authentic state of evolution as an on-going process of development and change appears to correlate to the child. In the chosen quest hero Lyra, the new Eve, we find innocence as feral and amoral that also produces the impression of authenticity to her curiosity about the world.

Materials explicitly locates human self-realisation as contingent upon cultivating knowledge as an expression of the development of consciousness. It is this consciousness that separates humanity within a hierarchy of beings. The primacy of consciousness in *Materials* evinces a Cartesian appreciation of lifeforms, based on human intellectual uniqueness and possession of a soul that by extension defines animals as instruments. F.E.Sutcliffe identifies Descartes philosophy as severing

[432] Pullman, *Subtle Knife*, p.78.

humanity from seeing the world and humanity's place in it as part of the holistic medieval pattern of the cosmos.[433] Sanctioned by the primacy of consciousness Cartesian authenticity comprises the aim to generate knowledge to 'make ourselves, as it were, masters and possessors of nature'[434] not for its own sake but for the good of humanity.

The active agency exercised by the Church in Lyra's world acts to restrict access to knowledge. *Materials* depicts the Church as evil through the perversion of science at the experimental unit in Bolvanger. Here the Church runs a programme to forcibly sever children from the developmental side of their nature to psychologically and spiritually castrate them and retain their 'innocence'. The experiments either result in heartbreak and death or a zombified and easily controllable state of semi-being. In this state children accept the established singular apprehension of the world without demur. Lyra's father, Asriel, fits within a Christian mythological framework as the rebel opposing the authority of God through seeking to gain power for himself. Presumably inculcated by the culture he has imbibed Asriel similarly uses science as a weapon. His opening of access to another world involves killing a child and using the energy to blast an opening that has massive environmental consequences across a series of worlds.

[433] F.E.Sutcliffe, 'Introduction', in René Descartes*, Descartes: Discourse on Method and the Meditations*, trans. by F.E.Sutcliffe (London: Penguin Books, 1968), pp. 20-21.
[434] René Descartes, , *Descartes: Discourse on Method and the Meditations*, trans. by F.E.Sutcliffe (London: Penguin Books, 1968), p. 78.

Asriel nevertheless provides a vehicle for rebellion against religious strictures. Rather than representing a counter-culture Asriel remains bound up with notions of good and evil implicit in Christianity, thus comprising Propp's figure of the false hero.
While Asriel's challenge to the Church's authority rallies wider counter-cultural forces to his cause, these forces only do so in order to break from the past. In this way *Materials* empathises with Asriel's rebellion but identifies that progress extends beyond a binary choice. Yet while Will and Lyra exercise freewill in making their own, independent third way, the narrative makes the survival of worlds contingent upon the nurturing of fully conscious beings which ensures the continuation of Cartesian principles of estimation.

The metaphor of the maze captures the self-directed choices along the way, and the challenges of disorientation and uncertainty in trailblazing a path to discovery. In this respect Lewis Mumford's eco-humanist three stage model for human technological development captures the teleology of *Materials*. Mumford's dissection suggests a teleological trajectory in technical development that allows for some minor instances of overlapping. Essentially in *Technics and Civilization* Mumford expresses hope in a neotechnic age emerging from the confusion and pollution of a paleotechnic era significant 'not in what it produced but in what it led to.'[435] Cognisant of the ecological vicissitudes of the paleotechnic Mumford describes it as 'a busy, congested, rubbish-strewn avenue between the eotechnic and neotechnic economies . . . [that] helped by its very disorder to intensify the search for order.'[436] Stewart Long notes that while

[435] Lewis Mumford, *Technics and Civilization* (Chicago: University of Chicago Press, 2010) p.211.
[436] Mumford, p.211.

his faith in humanity began to dwindle during the Second World War and the advent of nuclear power:

> Mumford did not abandon all hope. He felt that the megamachine can be defeated. But the overthrow of "the myth of the machine" will require a rejuvenation of the organic, and truly human, aspects of human culture. In an epilogue entitled "The Advancement of Life" Mumford (1970, 414-435) claimed that the key element in this rejuvenation is already underway – a re-discovery of life values which are able to survive technological and cultural change in history[437]

In *Technics and Civilization* Mumford acknowledges England as the key battleground upon which the paleotechnic era was established, and from which paths lead to the neotechnic. As the incubator of industrial revolution the nineteenth-century England that *Materials* reimagines has particular relevance for ecocriticism. Decisions taken at this point establish the industrial hegemony that continues to have long-term effects on ecology and the environment.

As knowledge proceeds through engagement with different worlds the activity that forges these links appears justified. It is in relation to the two Oxfords that we identify disjunctions between past and present to draw out differences and expose the development of human society. Lyra as a stranger in Will's Oxford finds that it shares many of the same landmarks as her own home city. This heightens her engagement with place, and correspondingly exposes the creep of modern development. She

[437] Stewart Long, 'Lewis Mumford and Institutional Economics', *Journal of Economic Issues*, XXXVI.1 (March 2002), 167-182 (p. 179).

notices even minor changes, where once there was undeveloped land, the overcrowding, or where something is, or should be, in relation to her 'original' Oxford. Through Lyra a folk memory and association with place is evoked. She cares about changes and perceives them in relation to her own world. Its quasi-familiarity causes us to reflect upon the nature and extent of humanity's imprint. Her relationship with Oxford contrasts with perceptions of the truly alien, transitory, places in the trilogy. While environment elsewhere is depicted almost uniformly as already degraded no lost ecological exemplar exists, or alternative against which to chart its decline. The affluent contemporary urban environment lacks the grime of Lyra's age. The city also reflects richness in human racial diversity at odds with her Oxford. Correspondingly little evidence exists of nature. Lyra enters a museum, 'a grand building, a real Oxford-looking building'[438] albeit one not existing in her world. Here she discovers 'the other' symbolically confined to exhibits of dead animal specimens and extinct remains (fossils). Pullman does not have her dwell on these artefacts, but rather uses their presence to convey a sense of space and time, she by-passes them in her pilgrimage towards the biological anthropology section.

Lyra's visit to the museum prefigures two meetings. These reinforce the central concern of the trilogy in terms of quest (for knowledge to replace superstition) and philosophy (why this is important). The characters introduced later become closely entwined in the plot. Firstly Lyra is approached by the sinister Charles Latrom, in an apparently chance encounter in the museum itself. Later she introduces herself to scientist, and eventual mentor, Mary Malone. The latter is found in a less ornate setting, being ensconced in a plain room within a physics block of a modern research

[438] Pullman, *Subtle Knife*, p.78.

building. Setting reinforces the association between characters and modernity, tradition and hierarchy. Charles Latrom CBE is old, like the museum. He represents the establishment, his role being to act to preserve the status quo by limiting access to knowledge, or in Pullman's terms to progress. The inversion of his surname spells 'mortal' and he smells of decay. This reinforces the perception that his values are ripe for replacement by the next generation to ensure new growth. Although he is found here he hails from Lyra's own world where he is known as Lord Boreal. In both realms therefore he carries a status indicative of holding power within hierarchical systems.

Mary's laboratory suggests a necessary break from the past. At first Lyra is disappointed by the building. 'These rooms, the walls of this corridor, were all flat and bare and plain in a way Lyra thought belonged to poverty…yet the brick walls were smoothly painted, and the doors were of heavy wood and the banisters of polished steel, so they were costly.'[439] Pullman exhibits almost a puritanical zeal in placing Mary in plain surroundings. This fits with her role as scientist where the truth makes plain that which has been embroidered by myth. The materials of her room seem solid and durable. They might be deemed an improvement on the traditional, local Headington stone, which is susceptible to erosion.

Mary Malone explains that 'Dark matter is what my research team is looking for…in the universe…for it all to hang together and not fly apart there needs to be more of it.'[440] She goes on to explain that in sifting through matter to find what is important her team have discovered shadow particles. These are particles of consciousness

[439] Pullman, *Subtle Knife*, p.86.
[440] Pullman, *Subtle Knife*, p.90.

with which it is possible to learn to converse. To do so you must remain open-minded then 'if you think, the Shadows respond.'[441] The ethereal, independent and pure characteristics of dark material intersect with notions of authenticity.

Malone explains that her colleague had tested a number of objects. 'He got a piece of ivory, just a lump, and there were no Shadows with that. It didn't react. But a carved ivory chess piece did. A big splinter of wood off a plank didn't, but a wooden ruler did. And a carved wooden statuette had more.'[442] These examples provide an unsettlingly anthropocentric view of nature. The ivory accrues authentic value through the extent to which it is worked upon, as a material. Ivory by the twentieth century had become increasingly taboo due to the effect on the populations of animals that produce it, and the cruelty involved in its collection.The wooden examples are interesting in how they relate to human exploitation of the environment. The plank of wood is by definition a worked piece of timber. Its use sustains our primary needs yet it is devoid of 'dust'. The ruler is a useful tool but has taken less conscious effort to create than the ornament, which therefore attracts the highest concentration of dust. The ornament itself embodies the notion of the progressive aesthetical improvement of the form of the natural object. The creation of dust while presented as good, as reflecting knowledge and progress, also relates to materialism and increased exploitation of the earth's resources.

There is a contradiction in Pullman's promotion of a modern and in his terms fully conscious future. The nature of dust would suggest that it is attracted more by the skilled work of the thoughtful artisan. In architectural terms there is more individual

[441] Pullman, *Subtle Knife*, p.93.
[442] Pullman, *Subtle Knife*, p.93.

thought and skill involved in the carving of religiously inspired symbolism on the buildings of the previously pious Oxford than in the computer assisted creation of the new secular version. While dust has proliferated in the religious past it is depicted as dissipating in the present, secular age, despite or perhaps because of technological advancement. In response *Materials* seeks to invest the world with an alternative supernatural perspective.

Building a sense of mythological authenticity *Materials* identifies two media that act as navigational tools to determine the course of the plot. Each of these tools resides with the mythological equivalents of Eve (Lyra) and Satanic snake as tempter (Mary Malone). These two roles in their original form comprise active instances of rebellion against the natural order of creation. In their revision *Materials* presents them as exhibiting a natural ability to communicate with a higher level of consciousness to make cognitive choices. They do so by interpreting complex signs produced respectively by an Alethiometer (truth compass) in the case of Lyra, and in Mary's use of the ancient Chinese divining method of the I-Ching, which she initially embraced self-consciously and sceptically as a scientist. In each case divinatory techniques engage with the spirit world. In mythology the diviner possesses 'a special gift of helping, healing and providing ease in moments of affliction'[443] and typically acts as a conduit to esoteric knowledge. Lyra and Mary each explore and interpret the intricacies of 'pictographic signs (that) offer multiple readings, themes or resources that the specialist was able to identify according to the situation.'[444] Rojas recognises that the divinatory process itself involves a chronotopic exposition 'as a

[443] Araceli Rojas, 'Reading Maize: A Narrative and Psychological Approach to the Study of Divination in Mesoamerica', *Journal for the Study of Religions and Ideologies*, 15.43 Spring (2016), 102-124 (p. 107).
[444] Rojas, p.105.

mediator of multiple factors'[445] with the facility to 'connect with time and space in order to acquire significance in the narrative.'[446] The role of the diviner becomes pivotal through how they exercise cognition to explain the signs. *Materials* makes the process of making sense of the multiple options both logically deductive and a primal ability. Rojas writes of how Jung regarded the practice of divination as 'a path toward individuation (illumination): they are methods of finding a higher level of consciousness'[447] the process comprising a 'transformation of the psyche …(which) is a liminal stage. In the Chinese philosophy contained in the I Ching, liminality is comprised of the expression I, which stands for change, *rite de passage*.'[448]

Navigation in a disordered world forms a theme in *Materials*. In the earlier chapter on the labyrinthine structure of *Rings* I argue that the text follows a repetitive, cyclical pattern, established firstly symbolically in microcosm at the point at which the quest truly begins. This comprises a rite of passage preparatory to the commencement of the quest proper. *Materials* follows a similar, albeit inverse multicursal, pattern leading to revelation that presages the overall narrative structure. Lyra's journey to enlightenment begins in *Northern Lights* when she first realises the danger of her situation and determines to escape. The manner in which she does so leads us to identify the virtue of those who assist her and allows Lyra to learn more about herself and her place in the world.

The watery maze of the canal system, a man-made environmental feature, facilitates Lyra's escape and metaphorically represents the pattern and pathway toward

[445] Rojas, p.106.
[446] Rojas, pp. 108-109.
[447] Rojas, p.115.
[448] Rojas, p.115.

salvation in the text as a whole. While a symbol in England of the industrial age through the canal building boom of the eighteenth and nineteenth centuries, Mumford regarded the canal as a survivor from a gentler eotechnic age belatedly appropriated by the English.[449]

When Lyra sets out to secretly flee the house in London, where she has been lodging, she turns her back on the natural water course of the river with its exposed embankment to find 'a tangle of narrow streets…and into that dark maze she hurried now.'[450] The text divorces decision-making from fixed markers as the city lights make navigating by the stars impossible.[451] Her daemon, i.e. her conscience and intuition embodied in separate animal form, instructs her on the direction to pursue. 'Every so often he would stop, bristling, and she would turn aside from the entrance she'd been about to do down.'[452] The city environment leads to a number of intersections and her desire is to leave its environs to find safety. Within the complex pattern of streets the direction of progress is uncertain. 'She had no idea where she was, because she had never seen a map of London, and she didn't even know how big it was or how far she'd have to walk to find the country.'[453]

Lyra, trapped in a maze of uncertain dimensions, discounts the trams and underground railway as modes of transport before finding a side-road that leads to a canal basin. Here canal dwelling gyptians come to her rescue when child slavers attempt to ensnare her in their net. Following the demonstration of their virtuous

[449] Mumford, *Technics*, pp.122-123.
[450] Philip Pullman, *His Dark Materials: Northern Lights* (London: Scholastic Children's Books, 2007), p. 99.
[451] Pullman, *Northern Lights*, p.102.
[452] Pullman, *Northern Lights*, p.99.
[453] Pullman, *Northern Lights*, p.101.

credentials in the process of saving Lyra, as with Bombadil in *Rings*, the gyptians offer sanctuary and insight into their counter cultural way of life. The episode marks the commencement of a rite of passage as Lyra learns essential information and properly embarks on her quest.

The quest hero typically engages with the figure of a helper who represents knowledge and magical power. However, the gyptians principally comprise counter cultural figures that represent authenticity rather than as magical beings. Character, virtue, ecology and the maze coalesce in the romantic migratory figure of the gyptian as human representatives of untamed nature. The gyptians invest the maze of canals with a chronotopic authenticity that assimilates their primal, migratory human aspect with artifice as an expression of continuity within a dynamic of human and ecological evolution.

The gyptians' profile draws upon the myth of the 'noble savage' a concept Kent Redford states originally suggested 'harmony with their surroundings that they all live justly and in conformity with the laws of nature. For many Europeans, these … were dwellers in an earthly Garden of Eden.'[454] Ter Ellingson writes of how this myth was inverted in the establishment's disdainful dismissal of the noble savage in its 're-emergence in the mainstream of anthropological discourse in Crawford's construction of the myth in the mid nineteenth century.'[455] These views subsequently gave way to neo- romantic identifications propagated anew by the twentieth-century green movement.

[454] Kent H Redford, The Ecologically Noble Savage, *Cultural Survival Quarterly*, 1991, 15.1, p. 46.
[455] Ter Ellingson, *The Myth of the Noble Savage* (Berkeley; University of California Press, 2001) p. xvii.

The artificial construction of canal and Fen dissolves in the light of an elemental gyptian racial identity, highlighted when the matriarchal Ma Costa tells Lyra, 'You en't gyptian, Lyra. You might pass for gyptian with practice, but there's more to us than gyptian language. There's deeps in us and strong currents. We're water people all through, and you en't, you're a fire person.'[456] This elemental status defines the gyptian as a cipher for a spiritual reading of ecology. It adds weight to the gyptians' good intentions, selflessness and counter-cultural credentials that prove crucial in the commencement of the quest. The gyptians figuratively reconcile the paradox between wild, elemental nature and the artificial transformation of a landscape. The extent to which they impose their own imprint on the land appears limited. The understanding that they adapt seems reasonable to infer from the lack of reference to them as authors of the canal system or as boat builders in their own right. We know too that the Fenland itself owes its development to Dutch engineers rather than to the gyptians. Indeed their meeting known as the 'zaal' originates in the Dutch name for hall. The gyptians may be wild but they are also opportunistic and thrive to the extent we are told that 'The gyptians ruled in the Fens.'[457]

The figure of the gyptian locates the spirit of nature in humanity as Lyra perceives its chief John Faa, a name lifted from Gypsy folklore and history,[458] 'more like a pillar of rock than a man' and 'She felt his voice rumbling like the earth itself.'[459] The gyptian decision to act implies the sanction of nature for the quest. The embodiment of

[456] Pullman, *Northern Lights*, p.113.
[457] Pullman, *Northern Lights,* p.113.
[458] Stanley Edgar Hyman, 'Reply to Bascom', *The Journal of American Folklore*, Apr. - Jun., 1958, 71:280 (Apr. -Jun.,1958), (pp.152-155) p.153.
[459] Pullman, *Northern Lights*, p.118.

nature within human actors contrasts with Tolkien's enchanted trees, the ents of Fangorn Forest. The gyptians meet in conclave at the Zaal under their leader John Faa. The ents convene an Ent Moot led by their leader Treebeard. In each case the actors become roused from low level self-defence to taking direct action that fits within a wider quest. Whereas Tolkien uses trees to equate the rising of the ents with an explicitly ecological backlash, Pullman's gyptians act in the spirit of a social or cultural uprising which infers the sanction of nature.

The geographic location chosen for the gyptians' home signifies how parallel worlds share images and pathways that intersect with each other. In English mythology and legend the water-bounded defensive loci, or British Isles in microcosm, appears repeatedly across history. Alfred the Great used the marshlands at Athelney in Somerset to defy the Danes, while the lesser known Hereward's stand against the Norman invaders which inspired Charles Kingsley's Victorian novel *Hereward the Wake* (1866) was set in the same East Anglian Fens. Hereward's identification as 'The Wake' translates as 'the watcher' or 'the watchful', a direct equivalent of the role of the gyptians. John Faa tells Lyra 'Every time the Costas went to Oxford, or half a dozen other families come to that, they brought back a bit of news. About you child.'[460]

The multiplicity of worlds, versions of the same place, and chronotopic connections invite comparison. Lynsey McCulloch notes that while locale for Kingsley's novel was historically determined it grounds English heroism in the eastern lowlands, geographically and geologically distinct from the location of Celtic and Gaelic

[460] Pullman, *Northern Lights*, p.121.

heroism in the wild mountainous sublime of the north and west. In the prelude to *Hereward*, 'Of the Fens', Kingsley specifically draws attention to the lack of heroic figures located in the most easily assimilated lands:

> The lowlands of the world, being the richest spots, have been generally the soonest conquered, the soonest civilized, and therefore the soonest taken out of the sphere of romance and wild adventure, into that of order and law[461]

Nevertheless McCulloch notes that Kingsley's novel romanticizes the earlier feral Fens to produce his 'defence of the Fens against the domination of highland spaces within romantic and historical literature.'[462] In so doing Kingsley invokes the image of the labyrinth as a defensive bulwark at the start of his novel. In a picture of Hereward's birthplace of Bourne he writes of, 'the great labyrinth of grass-grown banks, which was once the castle of the Wakes'.[463]

Pullman's primal gyptians offer a mythological defence of the semi-fabricated Fens, the 'soonest civilized' environment of Kingsley's terminology. The virtue of the development of the human-nature dynamic contrasts Hereward's eventual defeat with the gyptian Fens that serve as a base impregnable by the Church. The gyptians retain their own integrity as authentic humans, and by extension humans acting

[461] The Rev C. Kingsley, *Hereward the Wake: 'Last of the English',* Vol 1 (London and Cambridge: MacMillan and Co, 1866), p. 1.
[462] Lynsey McCulloch, ''Drowned Lands': Charles Kingsley's Hereward the Wake and the Maculation of the English Fens', in *Gender and Space in Rural Britain, 1840 - 1920*, ed. by Gemma Goodman and Charlotte Mathieson (Abingdon: Routledge, 2016), 73-86 (p. 73)
[463] Kingsley, p.27.

according to nature. Not only are the gyptians in Ma Costa's words 'water people' but like water their malleability finds them adapting to and naturalising the terraformed maze of Fenland, which itself seamlessly melds non-human nature with human sub-creation, legitimising the latter and securing the rebels against the Church.

For Lyra the Fenland produces an epiphany through a number of themes: her (re)discovery of her own early history; the liminal passage between her prosaic existence and joining the quest; her estimation of the true nature of the marginalised gyptians, their lifestyles, and consequently the Fenland environment. Here the purity and nobility of the Gyptians in holding dominion over the Fens finds expression in Ma Costa's sons' appearance at the Zaal where they flank their mother, walking 'proudly on either side like princes.' [464] The regal identity fits in with the hierarchical gyptian social structure represented at the Zaal by 'The heads of the six families.'[465]

Hierarchy among humans in Lyra's world takes on a natural form in the figure of the daemon. The lordly gyptians' project daemon doubles predicated toward feral, independent, creatures: Ma Costa and Tony Costa are both represented by the hawk;[466] Faa's advisor and second-in-command Farder Coram has a cat double;[467] while John Faa's crow daemon which reminds Lyra of the Master of Jordan College and his raven familiar[468] invests the text with a mythological significance. The corvid link between the Master of Jordan College and John Faa has associations with Norse mythology where 'the god Odin had two sacred ravens, *Huginn* and *Munnin*

[464] Pullman, *Northern Lights*, p.115.
[465] Pullman, *Northern Lights*, p.117.
[466] Pullman, *Northern Lights*, pp.104-105.
[467] Pullman, *Northern Lights*, p.119.
[468] Pullman, *Northern Lights*, p.115.

('Thought' and 'Memory').'[469] The dichotomy figuratively reconciles cognitive creativity and the past. In drawing attention to the similarity between Faa's crow daemon and the raven of the Master of Jordan College, Lyra raises the question of how they differ as signifiers in terms of expressions of virtue and power. Their proximity to the Norse image suggests a twinning of knowledge and tradition which in daemon form subtly favours the former over the latter. The crow that Faa projects has a diminutive stature and shorter-life span than its raven counterpart projected by the College's Master. The implication signifies that where knowledge and tradition come into conflict the former takes precedence. This may be reflected in Faa's having to come to terms with an adaptive relationship to pursue a primal mode of living within shifting environmental parameters.

Materials symbolically utilises the canal as an articulation of human ingenuity, imprinted upon the land that in being appropriated by the counter-culture articulates an alternative idea of progress. The use of the canal as a means of fleeing the city seems counter-intuitive in that travel by barge proceeds at a relatively slow pace. It functions as a symbolic statement about freedom from the polluted city and regulated life. Taking this token of the eotechnic age of development Materials plots a chronotopic course toward the neotechnic through a romantic reimagining of its utility during the paleotechnic. In England canals were predominantly imposed on the environment in the late eighteenth and early nineteenth century as conduits for industrialisation. Pullman's depiction of the canal in *Northern Lights* celebrates the artificial waterway by refracting twentieth century perceptions of the canal. The canal museum at Gloucester traces the shifting perceptions of canals from 'innovative,

[469] Steve Madge and Hilary Bunn, *Crows and Jays: A Guide to the Crows, Jays and Magpies of the World* (London: Christopher Helm Publishers, 1994), p. ix.

disruptive change brought to a preindustrial land…(while) later…canals (are associated) as signs of tranquillity.'[470] Canals are beguiling in the twentieth century in that they link development through 'the transformation of landscapes of labour into ones of leisure.'[471] In doing so they have become transformed into a symbol of authenticity moving from signifying 'modernity and economic transformation… (and now through their) decline… and… restoration for leisure, canals have become identified with tradition.'[472]

The canal system lends itself to inspection via the maze metaphor. It is the product of human ingenuity as an artificial construct that humanity imposes on the land. As a watercourse the canal realises Heidegger's critique that humanity values nature only in so far as it can be termed a standing-reserve, transformed into a resource and prized for its utility.

Materials romanticises the industrial history of the canal. It naturalises the inauthentic, constructed character of the artificial watercourse by associating it with the gyptian people who as an outcast counter-cultural group live a nomadic life as canal-dwellers their movements aligned to the seasons. The canal presents Pullman's wider narrative maze in microcosm in that it illustrates in miniature fundamental aspects of the text. In England the colloquial name for the canal is 'the cut', evocative of the wounding of the earth for the benefit of humanity. The canal cuts into and through the landscape to join disparate places and its original use was to facilitate development.

[470] Mike Crang, Spacing Times, Telling Times and Narrating the Past (2008) <http://dro.dur.ac.uk/5161/1/5161.pdf> [accessed 17 July 2017] p. 12.
[471] Crang, p.13.
[472] Crang, p.15.

> On 1st January 1790 the Oxford canal finally opened with the arrival in Oxford of 200 tons of cheap coal from the Midlands. This event was one important stimulus to the economic transformation of Oxford from a quiet university and market town to a large commercial and industrial centre. The advent of affordable coal in plentiful supply encouraged economic progress, but at the same time brought a largely silent pollution legacy which is still evident today[473]

The canal in *Materials* anticipates extension of the theme of cutting which emerges in the making of passages between separate worlds. These inquisitive incisions, while depicted as necessary to ensure progress, inflict wounds that produce climatic consequences and issues around human sustainability. However *Materials* ultimately suggests that in the long-term both the canal and the atmospheric cuts between worlds each create a conduit toward healing or redeeming a fallen world. The canal captures the sense of an intricate series of intersections, and parallel sections at alternative levels where a lock acts as a metaphor for difficulty of access. While the fundamental concept of Dust in *Materials* finds an echo in the canal as a rationally constructed work of artifice. If the canal represents a physical microcosm of the labyrinthine maze, then it also conveys a sense of the text's relationship with the material world. The canal requires continued maintenance in order to preserve it while its water quality is affected by sediment, the aquatic equivalent of dust.

[473] Heather Viles, ''Unswept Stone, Besmeer'd by Sluttish Time': Air Pollution and Building Stone Decay in Oxford, 1790-1960', *Environment and History*, 2 (1996), 359-72 (p. 359).

> sediment accumulation characteristics of canals …differ greatly from that of river systems…There is a lack of rapid dispersion processes, hence residence times for pollutants are long and sudden mixing of sediments into the water column from navigational activity causes high turbidity and a further influx of nutrients into the otherwise relatively still water column[474]

This description articulates the consequences of Heidegger's critique of humanity's cultivation of standing reserve through the canal's stillness and essential morbidity. The canal enslaves water to a primary purpose and like a maze includes 'dead-ends', unlike the meandering, constant, unregulated and natural labyrinthine flow of the river toward the sea. The anthropocentric perspective of *Materials* emerges through the canal. It illustrates an intercision by humanity that mortifies nature and leaves it moribund. In stark contrast to its lifeless, still waters the canal as a maze serves as the veins through which the life-blood of trade flows.

The maze that connects the fantasy worlds within *Materials* also intersects with our own world through the lens of history. Pullman's despised outcast gyptians with their pseudo-Romany demeanour reflect and mythologise an obscure strand of English proto-industrial history and counter-cultural threat. The use of the name 'gyptian for the canal dwellers, makes an explicit link for contemporary readers with the alternative lifestyle of the Romany people. Like their modern-day equivalents Pullman's gyptians live parallel lifestyles in communities that mainstream society

[474] Rebecca J.Lunn and Steve G. Wallis Lynn A. Swanson, 'Management of Canal Systems under the Water Framework Directive: Determining Fundamental Properties Governing Water Quality', *Hydrology: Science and Practice for the 21st Century,* II (2004), 160-67 (p. 161).

perceives as a threat. However *Materials* gyptians also draw on a forgotten history of nineteenth-century English canal families. This history depicts canal-dwellers as particularly suspect in two ways; firstly as a people comparable to the Romany through which they were similarly stigmatised for their lifestyle; and secondly through an added fear of them as possible agents of rebellion. Pullman replicates these stereotypes in the depiction of gyptians as outcasts and rebels. The gyptians secrete Lyra in a 'secret compartment' lined with 'cedarwood, which had a soporific effect on daemons' when their boat is searched by the authorities.[475] The mistrust of the Romany reflects the conjectures of romanticist writers of the nineteenth century on the origins of gypsies. Of these 'Some favoured Egypt as the homeland, suggesting the Gypsies were forced to become an itinerant tribe as punishment for making the nails hammered through the hands of the crucified Jesus.'[476] In the nineteenth century the two groups were conflated. Indeed the bane of nineteenth-century English gypsies, George Smith of Coalville, an ardent campaigner against the gypsy way of life first began campaigning against the itinerancy of canal boat families.[477]

In England attempts were made to combat the nonconformity of canal families, especially in respect of removing their children either permanently or through requiring that they enter mainstream education. Canal children were perceived to be at risk of corruption in communities regarded as atheist and immoral. In *Northern Lights* we find Pullman introduce the gobblers as they attempt to capture Lyra near the canal, and we learn that 'the gyptian people, we been hit worst than most by

[475] Pullman, *Northern Lights*, p.110.
[476] David Mayall, *Gypsy-Travellers in Nineteenth-Century Society* (Cambridge: Cambridge University Press, 1988) p. 75.
[477] Select Committee on the Canal Boats Act (1877) Amendment Bill; Together with the Proceedings of the Committee, Minutes of Evidence and Appendix', 1884.

these Gobblers.'[478] The gobblers work for a Church obsessed with imposing unthinking authority and control by separating the kidnapped children from their animal daemons.

There was a wide belief, and ample evidence to substantiate it, that canal-families took part in smuggling. The main fear of the canal-community though was through its potential as an incubator of dissent against the ruling order. Groups that threatened the hegemony and authority of the establishment that were perceived to garner support among the separate and independent canal community included the Chartists, who sought to extend the electoral franchise, and socialists. Added to these domestic threats were the republican sympathies of the many canal-dwellers with Irish heritage. These groups included the Fenians, and a group that drew its members largely from the canal community known as the Ribbonists. The latter in particular prefigure Pullman's gyptians as a form of floating secret society content to engage in 'small-scale disruptive acts to keep the populace "prepared" for a moment when the Irish upper classes would summon the nation to arms.'[479] In the meantime the Ribbonists provided a 'sanctuary role …at times extended to republican radicals fleeing British authorities'[480] while their prevalence in Ireland led to 'the Ribbonist members' feelings of group "ownership" over the canals as a physical space.'[481]

The description of Lyra on-board the narrow boat comprises elements suggestive of re-birth and coming into her inheritance. Her refuge takes on in utero qualities, as

[478] Pullman, *Northern Lights*, p.110.
[479] Jacob Shell, *Transportation and Revolt: Pigeons, Mules, Canals, and the Vanishing Geographies of Subversive Mobility* (Cambridge, Massachusetts: The MIT Press, 2015), p. 97.
[480] Shell, p.97.
[481] Shell, p.99.

secreted safely within, 'the low rumble of the gas engine shook the boat…She awoke in a narrow bed, with that comforting engine-rumble deep below.'[482] She later discovers the truth about her infanthood and discovers that Ma Costa whose boat she is on was her wet nurse when she was a baby.[483] The canal journey leads to a destination with wider symbolic significance. We arrive at a broad maze, where the boundaries of nature and human activity imperceptibly merge in the Fens, a 'never fully mapped wilderness of huge skies and endless marshland in eastern Anglia.'[484] Describing the Fens as an unmappable wilderness unites the maze structure with the feral and a source of fecundity, 'And now by a thousand winding channels and creeks and watercourses, gyptian boats were moving.'[485]

The Fens represent a return home for the gyptians and a return to a figure in her infanthood for Lyra. The Fenland might also symbolically represent a return to evolutionary origins and authenticity found in the Darwinian theory of a watery origin of life on earth. Darwin fantasised over re-presenting his theory of how life first appears through a process of repetition, 'all the conditions for the first production of a living organism' could be met 'in some warm little pond, with all sorts of ammonia and phosphoric salts, light, heat, electricity, &c., present.'[486] In *Materials* the return to Darwin's 'warm little pond' comprises a union between artificial watercourses, natural watercourses and the sea. The distinctiveness of each dissolves into an evolutionary soup merging into a natural ecology of change. Lyra's return here symbolises the

[482] Pullman, *Northern Lights*, p.106.
[483] Pullman, *Northern Lights*, p.129.
[484] Pullman, *Northern Lights*, p.112.
[485] Pullman, *Northern Lights*, p.112.
[486] Charles Darwin, *The Life and Letters of Charles Darwin. Vol. 3*, ed. by Francis Darwin (London: John Murray, 1888), p. 18.

wider re-birth of humanity in a kind of inverse Christening as she becomes initiated into an evolutionary counter-culture.

Making the gyptians representatives of nature casts the canal as a positive expression of harmony with the built environment. The canal's link between the city and the distant Fens through the wild gyptians suggests that it comprises a wildlife corridor, itself an expression of Pullman's post-industrial eye. Building upon a contemporary twentieth-century national narrative that celebrates the canal's reinvention as wildlife habitat *Materials* takes a *post hoc ergo propter hoc* approach that validates Mumford's idea of paleotechnic to neotechnic development. The negative, impact of the canal as an unnatural barrier to wildlife remains concealed. Peris et al note that 'water canals are infrastructures that to date have received little attention as barriers to animals, even though they may be responsible for major species mortality by drowning.'[487] A Council of Europe report refers to the canal as a barrier rather than a corridor to ecological rebirth. It concludes that 'In solving the barrier effect one should take the total ecosystem as a starting-point instead of one species (-group)' especially in terms of 'the largest representatives of ecosystems, usually mammals like red deer and their predators. For them the barrier effect often causes severe population problems.'[488] While the post-industrial canal and its banks do also have the potential to act as a wildlife corridor, *Materials* presents the wild only through the anthropocentric perspective of the primal gyptians.

[487] Salvador Peris and Javier Morales, 'Use of passages across a canal by wild mammals and related mortality', *European Journal of Wildlife Research*, 50 (2004), 67-72 (p. 67).
[488] Nicolas de Sadeleer, Jean-Marc Fauconnier, Gijs Kurstjens, Guy Berthoud and Roger J. Cooper, 'Studies on Transport and Biological and Landscape Diversity', *Nature and Environment* No.132 edn. (Strasbourg: Council of Europe Publishing, 2003), p. 74.

The text further explores the idea of the maze in terms of other choices in transport options. The choices here mediate the environmental sensibilities of its author. Flight extensively appears as a medium for moving swiftly over and between worlds. Alternative and marginalised forms of flying-machine appear in the absence of conventional aeroplanes: Witches travel through the air on 'cloud pine' broomsticks; the dirigible features in both the hot air balloon and a gas-filled variant ubiquitously referred to as a zeppelin; mechanical, clockwork insect drones appear; gyrocopters replace helicopters; and, as a product of technological advancement an 'intention craft' facilitates rapid flight guided by intuitive feedback from the 'daemon' (ie intuition/sub-conscious) of the pilot.

The zeppelin and the intention craft in particular articulate historical revisionism and the course of progress respectively. Each appears to offer an alternative to the noise and atmospheric pollution of contemporary aviation. As a non-cyclical structure the maze invites innovation and as the structure appears to continue *ad infinitum* parameters dissolve, to the extent that the realms of possibility broaden in a process of 'becoming'. Asriel's intention craft illustrates this process of 'becoming' that naturalises technology as an extension of the will, repudiating ideas of primal authenticity. Such a contention reflects Mumford's 'interpretation of the changing design of machines … (that) led him to conclude that neotechnic technology is becoming increasingly organic in nature (Mumford 1934, 367).'[489]

[489] Long, p. 173.

The historical parallel found in the use of the zeppelin name highlights the editing of technology found in the fictional world. Count Ferdinand von Zeppelin manufactured the first of his airships in 1900 whereas Karl Benz' first car appeared in 1885 with mass production in 1893. In Lyra's world however the dirigible exists but the motor.
-car is unheard of. The dirigible at first sight appears to offer a more ecologically friendly form of transport than either the motor-car or polluting modern aircraft. It gives the impression of a gentler mode of transportation, but as with the canal the zeppelin has hidden moral and ecological antecedents and implications. Hugh Hunt's research on zeppelin construction rediscovered the production costs that required large amounts of cow intestines with 'the guts from more than 250,000 cows needed to produce the bags that held the hydrogen gas in each Zeppelin.'[490] While the zeppelin in *Materials* might be constructed using alternative materials the use of the zeppelin name romanticizes actual history and our perspective on the non-human cost of development.

By contrast to the romantic transport alternatives in Lyra's pseudo-Oxford the road in Will's Oxford denotes danger. The 'window' providing access between worlds is in a busy part of contemporary Oxford, but this 'hole' in the fabric of our environment goes undiscovered precisely because humans are too busy to notice, or value, their surroundings. We learn that the window is hidden because 'You could only see it from the side nearest the road.'[491] The juxtaposition of the hole with the road provides a parallel with the hole in the ozone layer caused in part by emissions from the motor car yet to which people ordinarily remain oblivious. The motor car, excised

[490] Sam Jones, Wurst luck – how Zeppelins hit German sausage-eaters (2013) <https://www.theguardian.com/lifeandstyle/2013/aug/23/wurst-zeppelins-german-sausage> [accessed 5 July 2017].
[491] Pullman, *Subtle Knife*, p.15.

from Lyra's world, leaves her ill-equipped for her encounter with the Oxford Ring Road. On entering Will's world at this juncture she comes into collision with a vehicle, jeopardising her entire mission. To use the terminology of the maze it almost literally comprises a 'dead end'. While representing an antipathy toward contemporary roads the depiction illustrates inconsistency. The celebrated canals of Lyra's world, which also exist in Will's world, comprise an artificial imposition on the landscape and a physical barrier more profound than that of the road.

The maze metaphor continues throughout. Mumford's identification of stages of development implies that technological advancement necessarily involves an environmentally painful period of transition along evolutionary paths toward a brighter technological future. The spectre-haunted world of Cittagazze initially comprises an unavoidable stage in unlocking the potential of the maze. Charles Latrom describes this as 'The crossroads…(which is) too dangerous for us to visit at the moment.'[492] Citagazze embodies the negative consequences of irresponsible and exploitative use of power. The eponymous subtle knife of the second part of the trilogy forged here facilitates the cutting of passageways and the creation of multiple access points between worlds. The potential benefits of opening up knowledge by this means becomes corrupted as the elders of the city use the tool irresponsibly and selfishly.

> "They pass into other worlds and steal from them and bring back what they find. Gold and jewels of course, but other things too, like ideas, or

[492] Pullman, *Subtle Knife*, p.208.

> sacks of corn, or pencils. They are the source of all our wealth," he said bitterly, "that Guild of thieves" [493]

The cautionary example of Cittagazze illustrates the potential for loss and going astray within the maze. The consequences here to sustainability of human life become manifest. The exploitation of other worlds rebounds on the adult citizens of Cittagazze who become prey to spectres that arise every time a new cut is made through to another world and not re-sealed. The characteristics of the fall of Cittagazze reside in the actions of an elite ruling class, and in a materialist society that exploits other worlds. Materialism becomes the *raison d'etre* of the use of the maze, the sole rationale for activity driven by selfish gain. The connection of the act of travelling between worlds and atmospheric consequences echoes contemporary concerns with environmental sustainability. Andersson and Nassen's study of materialism incorporates the idea of the carbon footprint as an aspect of the well-established link between materialism and lack of concern for the environment. Their extension of the definition of materialism beyond possessions to markers of esteem that confer status includes in particular the impact of large numbers of long-haul flights to exotic locations.[494]

Drawing attention to the atmospheric consequences of the actions of the elders of Cittagazze on sustainability tangentially parallels this with the contemporary world. At one point in conversation in the mountains in the world of Cittagazze, Lyra complains about the heat and asks Will about the climate in his world. In reply he observes that

[493] Pullman, Subt*le Knife*, p.142.
[494] David Andersson and Jonas Nassen, 'Should environmentalists be concerned about materialism? An analysis of attitudes, behaviours and greenhouse gas emissions', *Journal of Environmental Psychology*, 48 (2016), 1-11 (p .2).

‘the climate’s been changing. The summers are hotter than they used to be. They say that people have been interfering with the atmosphere by putting chemicals in it and the weather’s going out of control.’[495] The significance of Cittagazze resides in the apparent necessity of visiting it as a means of gaining access between all other worlds. The quest establishes a need to inquire into the nature of being through such access, and explicitly excludes opting out of this. In an epiphany in *The Amber Spyglass*:

> Will considered what to do. When you choose one way out of many, all the ways you don’t take are snuffed out like candles, as if they’d never existed. At the moment all Will’s choices existed at once. But to keep them all in existence meant doing nothing. He had to choose, after all [496]

Beyond this utility the shaman Stanislaus Grumman articulates the value of inquiry with other worlds, having found ‘grains of wisdom in every stream of it.’[497] The recognition that Cittagazze comprises an unavoidable staging post in negotiating a way through the maze represents a negative point of transition in the maze. As such it articulates the worst consequences of exploitative behaviour and irresponsibility. Cittagazze evokes the spectres of materialism, imperialism and unbridled appropriation of resources and the connectivity between places where actions have consequences across borders.

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[495] Pullman, *Subtle Knife*, p.322.
[496] Philip Pullman, *The Amber Spyglass*, (London: Scholastic Children’s Books, 2001), pp. 14-15.
[497] Pullman, *Subtle Knife*, p.293.

Not until the final instalment of the trilogy do we find that a prospect exists for by-passing Cittagazze. By attenuating his intuition and sensations of the atmosphere of each world Will becomes able to discern alternative worlds and decide which he will enter. It enables him to harness the power of technology represented by the subtle knife to by-pass the Cittagazze intersection. He becomes able to control the direction of progress by making an informed choice.[498] In stark contrast earlier in the trilogy both he and Lyra pointedly note in conversation that they had begun their quest quite by chance by making choices without which 'None of this would have happened.'[499] The change shifts the dynamic as Will's development reflects his maturity as a personal coming of age, and as an omen for humanity itself with Will representing the Adam figure, the progenitor of humanity in Christian mythology.

We find the sanction of mythological dominion over the planet replaced by a dominion confirmed and located in our own consciousness of the world. The earth and the non-human become largely understood as representing an unconscious system, a reflex, and as such not purely alive in the same terms that higher beings are. The rite of passage of the quest hero in *Materials* appears securely tied to making sense of multiplicity in a multiverse where traditional order restricts access to knowledge and development. The overt agenda of denying the authority of a single creative force finds expression through the medium of parallel worlds and the complex series of passages between them. The overt evolutionary articulation of nature in *Materials* lends itself to a multicursal labyrinthine reading. The following chapter will look at how a unicursal labyrinthine ecological order appears in

[498] Pullman, *Amber Spyglass*, p.276.
[499] Pullman, *Subtle Knife*, p.276.

Materials, and how Pullman engages with fixed ideas and natural forces resistant to change.

Chapter Eight

Iconoclasm: the Unicursal Labyrinth and fixed nature in Materials

The only fantasy that I've felt to be emotionally satisfying is a book called *A Voyage to Arcturus* by David Lindsay… It's about morality—good and evil—and he deals with it in a way that is so forceful and so powerful that it sweeps aside any doubts you may have about the validity of the genre, in a way that Tolkien certainly doesn't. Tolkien seems to me reactionary, conservative, fearful of a modern world. Fearful of anything that isn't sanctioned by the passage of long eons of time. I think what I'm doing in *His Dark Materials* is politically the reverse of that.[500] Philip Pullman.

In the interior of every individual, of every aggregate of individuals, of every chemical atom, he clearly perceived the presence of the green corpuscles. But, according to the degree of dignity of the life form, they were fragmentary or comparatively large… the green corpuscles were in a condition of eternal discontent, yet, blind and not knowing which way to turn for liberation, kept changing form, as though breaking a new path, by way of experiment… These subdivided sparks of living,

[500] Pullman, Philip, 'His Grimm Materials: A Conversation With Philip Pullman, 2012' https://www.motherjones.com/media/2012/11/interview-philip-pullman-grimm-fairy-tales-his-dark-materials-book-dust/ [Accessed 10.4.21]

> fiery spirit were hopelessly imprisoned… and corrupted.[501] David Lindsay, A Voyage to Arcturus.

The traditional definition of ecology as 'the relations of living organisms to their surroundings, their habits and modes of life'[502] expands in *Materials* to incorporate and extend Lindsay's conception of conscious atoms in *A Voyage to Arcturus*. Lindsay's distinction between the passive 'degree of dignity' of lifeforms develops into Pullman's active engagement between lifeforms and dark matter atoms. This substance also known as dust provides an exception to the text's predominant theme of nature as morally neutral. Higher lifeforms demonstrate being 'fully-conscious' through their sub-creative output which in turn both attracts and generates these enervating atoms. As a result an implicit taxonomy forms to relate ecology to an evolutionary scale of 'consciousness.' Humanity sits at the apex of this scale through more than evolutionary chance. The approach serves to replace the divine separation of humans and animals with a scientific sanction ratified by a new mythology. It reprises René Descartes' famous contempt for what he saw as the unconscious replication of functions in nature as opposed to the value of creatures able to demonstrate thought. As Keith Holmes notes Cartesian thought holds that 'animals were mere machines or automata, like clocks…the difference was that within the human machine there was a mind and therefore a separable soul.'[503]

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[501] David Lindsay, *A Voyage to Arcturus* (London: Victor Gollancz Ltd, 2003), pp. 275-276.
[502] J.A. Simpson and E.S.C.Weiner, *The Oxford English Dictionary*, 2nd edn (Oxford: Clarendon Press, 1991), p. 58.
[503] Keith Holmes, *Man and the Natural World: Changing Attitudes in England 1500-1800* (Harmondsworth: Penguin Books Ltd, 1984), p. 33.

Materials echoes Arcturus, where atoms struggle against parameters found within the rhythm of an integral labyrinthine cycle; 'the rhythm is caused by … Crystalman's atmosphere. His nature is rhythm as he loves to call it - or dull, deadly repetition, as I name it.'[504] In *Arcturus*, the atoms thus restrained exhibit frustration; 'a consequence of the obstruction they met with… the green atoms were not only being danced about against their will but were suffering excruciating shame and degradation in consequence.'[505] *Arcturus* invests atoms with a will that implies that the cosmos has a purpose. *Materials* provides access to the presence and intention of atoms through the twin mediums of science and mythology respectively. Pullman's atoms are discoverable and demonstrable in scientific terms and inform the mythology that prophesises Lyra's quest. In the same interview where Pullman acknowledges the influence of Lindsay he identifies that 'the way you speak of the characters in your story shows what you think of the values of conservatives, or evolution, for example. It shows where your moral center is. So you are in the message business whether you like it or not.'[506]

Materials recognises that the authenticity of a cyclical structure of cosmology and ecology resides within the concept of God. Lyra's steampunk world swiftly establishes that a pseudo-Victorian theocracy clearly directs academic inquiry. Within the first forty pages we learn of the anxiety of the Master of Jordan College about supporting a scientific expedition that might be seen as supporting heresy.[507] The principle that God's writ applies across the board appears through innuendo and

[504] Lindsay, p. 271.
[505] Lindsay, p.275.
[506] <http://www.motherjones.com/media/2012/11/interview-philip-pullman-grimm-fairy-tales-his-dark-materials/>
[507] Pullman, *Northern Lights*, p.32.

inference; i.e. the text interchangeably alternates between referring to God and the alternative term 'The Authority.' The (il)legitimacy of the divine emerges in the text's 'intercision' that separates God and nature, exposing God as a fraud. 'The Authority, God, the Creator…were all names he gave himself. He was never the creator'[508] while God's death appears in a chapter entitled *Authority's End*.[509]

The explicit multiplicity of Materials rejects the single attribution of authenticity as found in unicursal and fixed structure. The Church in Materials melds all denominations into one unthinking mass of delusion:

> Ever since Pope John Calvin had moved the seat of the Papacy to Geneva and set up the Consistorial Court of Discipline, the Church's power over every aspect of life had been absolute. The Papacy itself had been abolished after Calvin's death, and a tangle of courts, colleges and councils, collectively known as the Magisterium, had grown up in its place[510]

The human personification of Christianity primarily appears in stereotypical, and one-dimensional, character profiles of individual members of official and semi-official groups. These myriad Church organisations suggest an innate human orientation toward diversity of thought. Yet the finer points of doctrinal difference implied by this multiplicity remain largely unexplained, shutting off the possibility of alternative forms of Christianity. The result of this produces a parody of Christian identity in shallow

[508] Pullman, *Amber Spyglass*, p.33.
[509] Pullman, *Amber Spyglass*, pp.424-440.
[510] Pullman, *Northern Lights*, p.31.

caricatures. The implicit evil of these characters and the teleological certainty of their defeat in the face of scientific explanation finds expression in the homophonic teleology in the name of the inquisitor-in-chief Hugh MacPhail ('you must fail').

MacPhail differs only from the branch of the Church known as the Gobblers (General Oblation Board) in extent. The Board's interest lies in negating the effects of Dust, which includes experimenting on children at its Bolvangar research establishment to separate them from their true nature and potential. MacPhail spells out a more fundamental antipathy to Dust and life itself, stating: 'better a world with no church and no Dust than a world where every day we have to struggle under the hideous burden of sin. Better a world purged of all of that!'[511] MacPhail sanctions and 'blesses' the mission of an assassin sent to murder Lyra, and ultimately martyrs himself to the same cause.

Ruta Skadi emphasises the chronotopic cruelty of the Church as she argues that the witch clans should unite in common cause with Asriel.

> "I thought of the Bolvanger children…of many more hideous cruelties dealt out in the Authority's name- of how they capture witches, in some worlds, and burn them alive… He showed me things I never had seen, cruelties and horrors all committed in the name of the Authority, all designed to destroy the joys and the truthfulness of life' [512]

[511] Pullman, *Amber Spyglass*, p.74.
[512] Pullman, *Subtle Knife*, p.283.

The unity of the closed mind, unwilling to consider alternatives for fear of the consequences, unites the branches of the Church, but it also more importantly maintains the political and societal *status quo.* Lyra and Will's quest to change the world proceeds inexorably toward revolution against the idea of God per se. *Materials* reprises the Fall but this time with humanity as the winner while God suffers the loss of immortality. The ecological implications of severing the link between the divine and the unity and order of nature negates humanity's claim of hegemony of the world by divine sanction. However, rather than question humanity's claim to supremacy in the world, *Materials* replaces divine sanction with a self-generated/self-evident dominion by virtue of possessing markers of consciousness/intelligence.

The death of God symbolically proceeds through the instrument that destroys the unicursal cosmological pattern that circumscribes life. Fra Pavel an agent of the Church describes the subtle knife as more than an instrument that opens passages to other worlds but invests it with 'a power greater than that…It is capable of killing the most high angels, and what is higher than them. There is nothing this knife cannot destroy.'[513] The eldest of the Cliff Ghasts identifies the martial significance of the knife as the only means by which God can be defeated in battle.[514] The knife cuts through barriers between possible worlds, creating multiplicity. As such the eco-labyrinthine dichotomy between labyrinth proper and maze provides a valuable means of reading the text. The so-called subtle knife as it undermines the fabric of God's universe conflates the figure God with the structural design of the cosmos. It fulfils the prophecy of ending the life of God somewhat inadvertently rather than

[513] Pullman, *Amber Spyglass,* p.70.
[514] Pullman, *Subtle Knife*, p.284.

purposefully in battle. In wielding the knife in the final confrontation Will actually seeks to protect God from attack in an act of charity that releases the deity from his crystal carriage and facilitates his passing.

> Will cut through the crystal in one movement and reached in to help the angel out. Demented and powerless, the aged being could only weep and mumble in fear and pain and misery and shrank away'
>
> "It's all right," Will said, "we can help you hide, at least. Come on, we won't hurt you"
>
> The shaking hand seized his and feebly held on. The old one was uttering a wordless groaning whimper that went on and on…
>
> Between them they helped the ancient of days out of his crystal cell; … he was as light as paper, and he would have followed them anywhere, having no will of his own…But in the open air … to their dismay his form began to loosen and dissolve. Only a few moments later he had vanished completely… (with) a sigh of the most profound and exhausted relief.[515]

The decrepit physical appearance of God disabuses the reader of an eternal force informing earthly existence. Existence continues irrespective of his passing. The ending of the 'Authority' as an entity appears to go unnoticed by the pseudo-nineteenth-century Church. The Church appears to take more interest in dogmatically attacking the enemies of God rather than an interest in discovering the truth about the deity.

[515] Pullman, *Amber Spyglass*, pp.431-432.

The apparently benign passing of a time-worn God rejects the concept of the self-renewing eternal cycle of life. Ruth Livesey writes of how the fin de siècle 'at the end of the 19th century in Britain…did not just refer to a set of dates, but rather a whole set of artistic, moral and social concerns… (it) invokes a sense of the old order ending and new, radical departures.'[516] In the language of Mumford's *Technics and Civilisation* the fin de siècle temporally marks the crossing of the divide between the paleotechnic age of science, directed by ignorance, to the neotechnic golden age of altruistic, enlightened, rational basis for a scientific technological age.

The environment in Lyra's world, and by extension the worlds linked through it to the quest, presents an image of a system in breakdown. Ecology reflects God's own physical decline; 'face sunken in wrinkles, of trembling hands and a mumbling mouth.'[517] Whereas the previous chapter identifies the intersection of maze and environment through the saving grace of the artificial waterway it correspondingly conveys the sense of a negative force where it intersects with the natural labyrinthine watercourse of the river.

Rivers play an important role in the mythologies of nation states. Historically rivers determine and direct the siting of human settlements both supporting and limiting the growth and number of human communities. During the nineteenth century, mythology, ecological health, and national identity coalesce in the figure of the river.

[516] Ruth Livesey, Fin de Siecle (2nd March 2011) <http://www.oxfordbibliographies.com/view/document/obo-9780199799558/obo-9780199799558-0030.xml> [accessed 8 August 2017].
[517] Pullman, *Amber Spyglass*, p.416.

Tricia Cusack writes of how this importance to national identity fuses the past and future to provide the comfort of continuity in a dynamic age.

> Many national and regional capitals are built around and closely identified with a particular river, which may come to signify the nation (e.g., the Thames, the Seine, the Vltava or the Bagmati). Rivers have long signified life and regeneration, and have been appropriated as symbols of national vitality. They have long represented the passage of time, and provide an excellent metaphor for the uninterrupted 'flow' or 'course' of national history. The nation, 'Janus-faced', forges a modern aspect for itself, yet simultaneously looks back to a putative historical identity or to a golden age to justify the collectivity, and pretends to the merging of past, present and future in a single stream of 'history'. Stories and legends accreted around rivers have been adapted for national histories and myths of origin, while ill-fitting historical episodes are occluded from national memory[518]

In William Morris's nineteenth-century Utopian romance *News From Nowhere* (1890)[519] the Thames features prominently as a conduit to reveal the state of society and attitudes toward the environment. Morris articulates the contrast between his own nineteenth-century England and that of a fictional, idyllic post-revolutionary, socialist English state. The narrative voice of the nineteenth-century visitor to a brave

[518] Tricia Cusack, 'Introduction: Riverscapes and the Formation of National Identity', *National Identities*, 9. 2 (2007), 101-104 (p. 101).
[519] William Morris, *News From Nowhere or An Epoch of Rest: Being Some Chapters From a Utopian Romance,* ed. by David Leopold (Oxford: Oxford University Press, 2003), pp. 122-172.

new England identifies the virtue of his alternative England while he navigates the Thames upstream from London in the company of its citizens.

> Ellen said: “How pleasant this little river is to me …what a little country England is, since we can so soon get to the end of its biggest river…don’t you find it difficult to imagine …when this little pretty country was treated by its folk as if it had been an ugly and characterless waste, with no delicate beauty to be guarded, and with no heed taken of the ever fresh pleasure of the recurring seasons…How could people be so cruel to themselves?”[520]

Morris does not overwrite the natural world but identifies with its sympathetic modification. His utopian character asks ‘Were they not always careful about this little stream which now adds so much pleasantness to the countryside’ to which the nineteenth-century narrator responds, ’They mismanaged it,’ quoth I’[521] and eventually lack of care led to disdain; ‘it was utterly neglected, till at last it became a nuisance.’[522] Morris locates the virtue of the new England partly through its role in the revival of the river illustrated in the harmonious co-existence between humanity and the natural world. While his atheist socialist identity and perspective led Morris to see Christianity as a time-limited stage in the evolution of the world[523] the author clearly weds human progress to reconciliation with the river as a primal force of nature.

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[520] Morris, p.161.
[521] Morris, p.168.
[522] Morris, p.169.
[523] Christine Poulson, 'Burne-Jones, Morris, and God ', *Journal of William Morris Studies*, 13.1 (1998), 45-54 (p. 52).

The river symbolises the fixed, repetitive order that is anathema to *Materials*. A fundamental requirement for life on earth the water cycle generates freshwater via an iterative process of recycling from storage in the ocean through evaporation, precipitation and return to the sea. This iterative process links to an overarching design that includes the heavens as 'the hydrological cycle, …is mostly driven by solar energy.'[524] In defining hydrology as a science Robert Horton presented a seminal spherical depiction of the hydrologic cycle in a paper to the American Geophysical Union in 1931. In his paper Horton defines hydrology as 'the duty of tracing and explaining the processes and phenomena of the hydrologic cycle, or the course of natural circulation of water in, on, and over the earth's surface.'[525] The definition identifies the water cycle as a process entirely separate and independent of humanity.

The river that plays an important role in the hydrologic cycle also features in mythological and religious terms as reflection of the cosmological pattern of design. Matthew O'Hare notes that river water naturally moves in spiral swirls and hugs the contours of the land to form meandering loops that produce richly bio-diverse riparian habitats[526] where eco-labyrinthine pattern acts as a facilitator and marker of ecological health.

[524] Taikan Oki and Shinjiro Kanae, 'Global Hydrological Cycles and World Water Resources', *Science*, 313 (2006), 1068-1071 (p. 1068).
[525] Jamie Linton and Jessica Budds, 'The Hydrosocial Cycle: Defining and Mobilizing a Relational-Dialectical Approach to Water', *Geoforum*, 57 (November 2014), 170-180. (p. 171)
[526] Dr Matthew O'Hare, 50 for the Future – Restore meanders along rivers and burns (22nd December, 2016) <https://scottishwildlifetrust.org.uk/2016/12/50-for-the-future-restore-meanders-along-rivers-and-burns/> [accessed 8 August 2017].

Symbolically Christ's identity as saviour emerges when submersed by John the Baptist in the River Jordan.[527] This auspicious occasion comprises a revealing and marks a significant point in the cycle of Christ's life. Underlining the importance of this particular river the crossing from one side of the Jordan to the other marks the journey out of the barren wilderness and into the Holy Land of the Israelites. In *Materials* Lyra begins her quest by leaving the confines of Jordan College, which represents a symbolic addition to her fictive Oxford that does not exist in Will's contemporary version. 'It's all changed ," she said… "There's Balliol. And Bodley's Library, down there. But where's Jordan?'[528] As a metaphor the absence of Jordan in contemporary England might suggest that the religious aspect while no longer physically visible has been absorbed within the nation's values.

The introduction of a Jordan College not only provides a sense of separation between Lyra's theocratic world and the contemporary secular Oxford, it also jolts Lyra and the reader into contemplating its wider significance. For Lyra, Jordan College immersed her in the culture of academia in Oxford, an academia infused with and subservient to the spirit of the Church. The departure of Lyra from Jordan symbolises the significance of her own counter-cultural journey toward a promised land for humanity.

Rather than using its modern title of the Thames in Lyra's Oxford the river goes by the name Isis which 'in Oxford …has long signified the stretch of the Thames north

[527] Bible (Mark 1:9)
[528] Pullman, *Subtle Knife*, p.72.

of Iffley Lock.'[529] The arcane name of the river fits with the idea of multiple and overwritten identities. The name Isis introduces a mythological aspect to the text. The River Isis takes its name from the 'Principal goddess of the Egyptian pantheon'[530] whose various accomplishments and attributes include; being a wanderer on a mission to restore the unity and fruitfulness of humanity; a searcher for knowledge that will bring power over death. Isis assumes various identities, including 'the Great Mother… goddess of …wisdom, lady of the waters…Lady of the Beginning'[531]; her name was interpreted as meaning 'knowledge.'[532] More recently, and contemporary with Pullman's time living and teaching in Oxford, Isis was chosen as a name for the former Spallation Neutron Source Facility, part of the UK's Atomic Energy Research Establishment in Oxfordshire.

Lyra engages in a transformative re-working of Isis as she challenges a number of aspects of the mythology, transforming the significance of her interactions with the river. Lyra appears to assimilate and alter the river's mythological identity while rejecting its ecological significance as a fixed marker of ecology. Lyra's transformative agency might reflect Ma Costa's suggestion that she represents a fire sign rather than a water sign. The attributions of Isis reflect the purpose of Lyra's quest (knowledge), indicate her status (the New Eve), and capture the intersection with science through association with the theme of particle research. At the same time the appropriation of the Egyptian figure of Isis connects the holy land with national mythology. In Book One of *Paradise Lost* Milton names Isis among his list of

[529] Helen Massy-Beresford, Isis: a name with a problem? (3rd November, 2014) <http://www.oxfordtoday.ox.ac.uk/features/isis-name-problem#> [accessed 9 August 2017].
[530] Jobes, *Part 1,* p.845.
[531] Jobes, *Part 1,* p.845.
[532] Jobes, *Part 1,* p.846.

pagan devils. However in *Areopagitica* he made 'the famous comparison of the search for Truth to the gathering by Isis of the scattered limbs of Osiris.'[533] Edmund Spenser too assimilated Isis, and 'almost Christianised' the figure in his allegorical poem The Faerie Queen, 'letting his maiden-knight Britomart worship in the 'Church' of Isis, who with Osiris symbolises justice and equity.'[534]

Having introduced Jordan College and the Isis River, Lyra symbolically leaves each behind at the outset of her quest. Lyra begins her quest for the truth by turning away from the river to embrace a hydrosocial relationship with water, rather than a hydrological one, through embracing the canal. The hydrosocial marks a shift in thinking about water ecology from the perception of the water cycle involving water management (i.e. a stewardship model) to water governance.[535] From the latter arises the idea of hydrosocial relationships with water that comprises a political ecology of water. Here water and society are inextricably linked, to the extent that water loses its autonomous identity and assimilates within a hydrosocial relationship in which humanity naturally contributes in a process of joint-agency. Jeffrey Banister identifies Erik Sywngedouw as one of the most influential exponents of 'viewing "things" as historical processes of production.'[536] Swyngedouw argues that 'hydraulic environments are socio-physical constructions, that are actively and historically

[533] M.E. Seaton, 'Milton and the Myth of Isis', *The Modern Language Review*, 17.2 (April 1922),168-170 (p. 168).
[534] Seaton, p.169.
[535] Linton and Budds, p.172.
[536] Jeffrey M. Banister, 'Are You Wittfogel or Against Him? Geophilosophy, Hydro-Sociality, and The State', *Geoforum*, 57 (November 2014), 205-215 (p. 207).

produced…There is, therefore, nothing apriori unnatural about constructed…hydraulic infrastructures.'[537]

The process of identifying virtue in the canal appears in the preceding chapter, while a corresponding antithetical process depicts the river as mirroring the decaying physical presence of God. Our first view of a river in *Materials* depicts the Isis as broadening to flow 'wide and filthy,'[538] a conduit for trade and a 'great highway.'[539] On Lyra's approach to London by zeppelin she crosses the same 'wide brown river'[540] as she unwittingly accompanies Mrs Coulter, unconscious of her identity as both the head of the Gobblers and her birth mother. As we shall see the proximity of the river to episodes that introduce danger into the text emerges as a theme throughout. Here Lyra comes to the realisation that Mrs Coulter's embankment flat will become her prison. The unappealing description of the industrial river as degraded in majesty and standing in close proximity to danger and threat finds its parallel in how *Materials* later depicts God. The cumulative effect undermines confidence in the existing order to sustain life. At the same time the state of the river provides an indication of the lack of environmental concern of the theocratic society. This lack of concern echoes criticism of the disconnection between religious symbolism and religious action. The prime example of this disconnect can be found in the Ganges where the sacred nature of the river water to Hindus remains unaffected by its growing pollution.

[537] Erik Swyngedouw, 'The Political Economy and Political Ecology of the Hydro-Social Cycle', *Journal of Contemporary Water Research and Education*, 142 (2009), 56-60 (p. 56).
[538] Pullman, *Northern Lights*, p.41.
[539] Pullman, *Northern Lights*, p.40.
[540] Pullman, *Northern Lights*, p.75.

In the trilogy's second instalment, *The Subtle Knife*, the river intersects with, and illustrates, the underlying environmental crisis within which the quest operates.

> vast changes they sensed in the world around them, …With every day that passed came more news; the river Yenisei was free of ice, and at this time of the year, too; part of the ocean had drained away, exposing strange regular formations of stone on the sea-bed; a squid a hundred feet long had snatched three fishermen out of their boat and torn them apart [541]

The text repeatedly returns to flooding as the fundamental symptom of the disharmony and collapse of the world order: The witches in the world of Cittagazze fly over 'regions devastated by flood or landslide';[542] in Lyra's world Scoresby finds melting ice and floods at the harbour on the Yenesei estuary and 'chaos, with fishermen trying to sell their meagre catches of unknown kinds of fish to the canning factories'[543] with their position exacerbated by economic measures taken to deal with the floods. The threat of flood represents the danger of the wild which contrasts with the docile canal. The floods invite parallels with contemporary concerns over global warming and climate change. We learn of 'hunters and fur-trappers drifting into town unable to work because of the rapidly thawing forest and the disordered behaviour of the animals.'[544] While the disruption illustrates the breakdown of order and a fragile and weak system ruled by an impotent God, the human activity that actually causes disorder to come to a head at this point does not draw direct censure. The main

[541] Pullman, *Subtle Knife*, p.122.
[542] Pullman, *Subtle Knife*, p.133.
[543] Pullman, *Subtle Knife*, p.216.
[544] Pullman, *Subtle Knife*, p.216.

cause of the environmental malaise is Asriel's shattering of the bounds that separate individual worlds in an attempt to destroy the authority of a divine order. Due to the flooding Scoresby sets aside his plan to use the road and hires a boat as he seeks an audience with the Shaman, Stanislaus Grumman. The river delivers Scoresby to Grumman and the proximity to natural disorder highlights that Grumman, as a representative of alternative spirituality, holds knowledge vital to the quest and consequently to saving the earth. Grumman's spiritual identity that deviates from his original English background and identity (his real name being John Parry, an English explorer and father of Will) speaks of breaking out of a cultural mould. Pointedly, like Mary Malone's embrace of the I-Ching, he embraces an alternative spiritual path as a consequence of scientific enquiry.[545] Parry's status as fugitive holding illicit knowledge in Will's England provides another passageway linking the theocratic world of Lyra and the modern nominally secular English state. The fusing of fiction and reality through the parallel of environmental crisis provides the text with a contemporary mythic currency. Grumman's role as seer here keeps the focus on destroying the Christian God, as the source of environmental disorder, as the Shaman will go on to insist that the subtle knife should be delivered to Asriel as the means of killing God.

The river functions as a unicursal labyrinthine conduit that delivers Scoresby and Grumman towards evil as they proceed to port. Juxtaposed against the canal and Fenland sanctuaries of book one, the river settlement comprises an encounter with the enemy's elite troops who have commandeered every lodging place.[546] Escape from the port involves once more turning aside from the dangerous river as a means

[545] Pullman, *Subtle Knife*, p.223.
[546] Pullman, *Subtle Knife*, p.227.

of progress and taking to the air in Scoresby's hot air balloon. When pursuit finally reaches them it coincides with a further marker of limnologic disorder and their own deaths.

> How far they could keep going was a question Lee didn't want to face; but when they were nearly at the entrance to the ravine, and actually on the edge of the dried river bed, he heard a change in the sound of the zeppelin. "They've seen us," he said[547]

As we reach the trilogy's final instalment, in *The Amber Spyglass*, the nexus between water and parameters features in the chapter's mythological revising of the Harrowing of Hell. Lyra and Will here choose to breach the bounds of the land of the dead to free the imprisoned spirits therein. In so doing they travel to the depressing refugee camp at the edge of life and death. From here their journey to the crossing begins 'beside a sluggish stream through bare-twigged scrubby bushes'[548] made even more redolent of death by the presence of an injured toad, obviously in pain but clinging to life.

The land of the dead lies beyond a stretch of water, and requires a symbolic crossing that hearkens back to both Egyptian and Greek mythology. The analogy here clearly points to crossing the river Styx, complete with reference to the services of Charon the ferryman. The Styx mythologically exudes a labyrinthine quality. In Book VI of *The Aeneid*, the living Aeneas' embarks on the same illicit journey to the land of the dead as Lyra. The chapter begins with him visiting a temple founded by Daedalus on

[547] Pullman, *Subtle Knife*, p.311.
[548] Pullman, *Amber Spyglass*, p.293.

his escape from the Cretan labyrinth.[549] From here Aeneas plots his journey. He meets Palinurus, his former helmsman, prevented from crossing the Styx as he did not have a proper burial due to being the victim of shipwreck. Consequently Palinurus begs Aeneas to 'sprinkle Dust on my corpse.'[550] When Aeneas himself arrives in the land of the dead he finds a watery labyrinth encircles the prison; 'that unlovely fen with its glooming water Corrals them there, the nine rings of Styx corral them in.'[551] Minos, who imprisoned Daedalus within the very maze he had instructed the architect to build, resides here as judge of the dead. Unlike in the Aeneid where another river, the Lethe provides the oblivion the dead seek in the eventual 1000 year cycle of freedom, return and reincarnation[552] in *Materials* Lyra will free the souls of the dead though the price of their ability to tell interesting and truthful stories about their previous life. At this point Lyra, formerly famous for being an accomplished liar, becomes the goddess of truth, the title previously the preserve of Isis, enabling her to breach the restraining bounds of the encircling river. This transformation prefigures the pivotal shift that changes the river from a barrier to a symbol of acquiesce to the new order at the heart of the quest.

Back in the world of the living the unicursal running river continues at first to portray ecological disharmony and convergence with danger. The floods have left 'village after village…up to its roofs in water and hundreds of dispossessed people.'[553] Up to this point the narrative follows the preceding two books in treading a well-worn

[549] Virgil, *The Aeneid*, trans. by C. Day Lewis (Oxford: Oxford University Press, 1986), p. 154.
[550] Virgil, p.167.
[551] Virgil, p.170.
[552] Virgil, pp.181-182.
[553] Pullman, *Amber Spyglass,* p.119.

mythological path whereby flood represents resistance and the anger of God, or the gods, toward humanity. As Plato discusses in the conversation of Timaeus:

> There have been, and will be again, many destructions of mankind arising out of many causes; the greatest have been brought about by the agencies of fire and water,… this has the form of a myth, but really signifies a declination of the bodies moving in the heavens around the earth… When… the gods purge the earth with a deluge of water, the survivors in your country are herdsmen and shepherds who dwell on the mountains, but those who, like you, live in cities are carried by the rivers into the sea…Whereas just when you and other nations are beginning to be provided with letters and the other requisites of civilized life, after the usual interval, the stream from heaven, like a pestilence, comes pouring down, and leaves only those of you who are destitute of letters and education; and so you have to begin all over again like children, and know nothing of what happened in ancient times.[554]

However whereas hitherto the river provides evidence of ecological malaise/disease that wholly acts to frustrate, a subtle shift emerges as the narrative nears its denouement. The sense of necessity of this pain in order for a new world order to be born starts to emerge. Consistent with the Mumfordian understanding of stages in

[554] Plato, *The Collected Dialogues of Plato Including the Letters*, ed. by Edith Hamilton and Huntington Cairns, trans. by Cooper et al, 14th edn (Princeton: Princeton University Press, 1989), pp. 1157-1158.

human development the death pangs of the existing order now serve as a wave that drives the quest forward.

The flooded villages sit within Lyra's own world in the Eastern most fringes of Europe alongside its version of the River Yenesei. This river has its source in Mongolia, passes through Russia, and links the snow clad mountains and Arctic ocean. Lyra presently resides within a cave in the dubious care of her mother, while *Materials'* talking, warrior, polar bears under their leader Iorek, sail to her rescue on a ship they purchase to escape the melting polar ice caps. The riverine townsfolk, in contrast to the wise 'gyptians of the diverse Fenland canals and waterways, illustrate their ignorance in their dealings with the bears.[555]

In terms of religious subtext the move to the Eurasian Steppe enables the text to bring Eastern Orthodox Christianity within its orbit, realising a polemical unity in its criticism of all strands of European Christianity and bind this with environmental degradation in the image of a world falling apart. When Will's journey converges here to find evidence of earthquake and flood a Russian Orthodox Priest praises the antipathy of the urban town to the bears thus providing a theological unity with the evil Western Church:

> 'They are afraid of the bears. And so they should be – they are children of the devil. All things from the north are devilish. Like the witches – daughters of evil! The church should have put them all to death many

[555] Pullman, *Amber Spyglass*, p.110.

> years ago. Witches – have nothing to do with them…They will try to seduce you' [556]

We also learn from the Priest a significant piece of information about the change brought about by Asriel's exertion of power in making passage between worlds. The Priest links the cataclysm with the end of the world according to Christianity in the Book of Revelation. In describing the effect he tells of how:

> 'Rivers flow backwards…The great river only a short way from here used to flow north into the Arctic Ocean. All the way from the mountains of central Asia…for thousands and thousands of years, ever since the Authority of God…created the earth. But when the earth shook and the fog and the floods came everything changed, and then the great river flowed south for a week or more before it turned and went north' [557]

The floodwater possibly mirroring the breakdown of order, and the teleological necessity of God's passing, now acts in an unexpected way. We learn that the bears capitalise on the Arctic melt water 'letting the river take them as far inland as it could – and as it had its source in the northern foothills of the very mountains they sought, and as Lyra was imprisoned there too. Things had fallen out well so far.'[558] The sense of a turning of the tide, and of nature changing sides transforms our

[556] Pullman, *Amber Spyglass*, p.105.
[557] Pullman, *Amber Spyglass*, p.103.
[558] Pullman, *Amber Spyglass*, p.117.

perspective of Pullman's reference to the 'turbidity'[559] of the watercourse. The reference to this term for sediment, the aqueous correspondent to dust, might suggest that a conscious choice informs the river's assistance of the rebellion against authority, thus investing authentic natural sanction to the quest itself.

Nature freed of restraint participates in the quest. Here, at the dawn of the new age post the destruction of God, a stream also acts to frustrate the threat of their would-be assassin to the consummation of Lyra and Will's relationship as the new Adam and Eve.

> His foot slipped; his momentum carried him down towards the stream…His head cracked against a stone, and he fell stunned with his face in the water [560]

The breaking apart of the old order that the river illustrates finds an echo in the disorder of the shifting alignment of the world. The change in polarity renders the physical world defunct as an infallible indicator of the direction of progress. The magnetic compass now obsolete provides a stark contrast to the alethiometer that Lyra uses to navigate using a combination of human intuition attuned with cosmological intelligence to make decisions. Yet this break from the cosmological design through disunity serves to present an alternative form of universality that saves the maze-like narrative from descending into complete randomness and chaos.

[559] Pullman, *Amber Spyglass*, p.119.
[560] Pullman, *Amber Spyglass*, p.495.

While establishing a multiplicity the text finds it impossible to dispense entirely with essential unicursal labyrinthine qualities of: repetition; unicursal determinism; and intrinsic meaning embedded in pattern. The sense of history repeating in the separate worlds of Lyra and Will provides evidence of a temporal cycle.

Pullman's maze necessarily involves a structure through which to make sense of chaos in a world divorced from a theological explanation. James Gleick summarises the scientific ideas developing around complexity and multiplicity theory in his book *Chaos: Making a New Science* (1987):

> Chaos poses problems that defy accepted ways of working in science. It makes strong claims about the universal behaviour of complexity. The first chaos theorists…shared certain sensibilities. They had an eye for pattern, especially pattern that appeared on different scales at the same time. They had a taste for randomness and complexity…Believers in chaos – and they sometimes called themselves believers, or converts, or evangelists – speculate about determinism and free will, about evolution, about the nature of conscious intelligence. They feel that they are turning back a trend in science toward reductionism, the analysis of systems in terms of their constitutent parts…They believe that they are looking for the whole [561]

[561] James Gleick, *Chaos: Making a New Science* (Harmondsworth: Penguin Books, 1988), p. 5.

Gleick pre-empted the book with a *New York Times* article with a specific focus on the work of Benoit Mandelbrot entitled 'The Man Who Reshaped Geometry.'[562] Here Gleick recounts Mandelbrot's unorthodox pursuit of knowledge that revolutionised scientific thinking through producing 'a new way of describing, calculating and thinking about shapes that are irregular…He had an insight into an organizing structure that lies hidden among the hideous complication…(and from this) A new geometry has emerged , and it turns out to be nature's own.'[563] Gleick describes the mode of access that Mandelbrot approaches his science with as reliant upon 'visual, spacial, turning abstract problems into vivid recognizable shapes.'[564] Mandelbrot describes these shapes as fractals, 'both fractured and fractional', but which brought order and uniformity by imposing an 'organizing structure' which suggests that 'complexity was not just random, not just accident'[565] but that it embodies meaning. Mandelbrot brings to bear interpretation and intuition of these signs all around us, in the same way that Lyra provides a breakthrough in Mary Malone's dark matter research. Lyra's thought processes guide her intuitive faculties and produce images on the computer screen:

> patterns that were held for a moment only to break apart and form again, in different shapes …they looped and swayed, they sprayed apart, they burst into showers of radiance that suddenly swerved this way or that like a flock of birds changing direction in the sky. And as

[562] James Gleick, 'The Man Who Reshaped Geometry' (8th December, 1985) <http://www.nytimes.com/1985/12/08/magazine/the-man-who-reshaped-geometry.html?pagewanted=all&mcubz=0> [accessed 28 August 2017].
[563] Gleick, Geometry.
[564] Gleick, Geometry.
[565] Gleick, Geometry.

> Lyra watched, she felt the same sense, as of trembling on the brink of understanding[566]

These images communicate with Lyra and Mary to convey cosmological truth, in the same way as the images align in Lyra's alethiometer and guiding patterns emerge in Mary's use of the I-ching to divine meaning.

Lyra and Mandelbrot share in common the personification of knowledge proceeding from an unorthodox approach to science, founded on an unconventional educational background. Mandelbrot's education as a child fleeing the Nazis left him claiming not to know the alphabet and having to work out his own method of solving mathematical problems. Lyra's similarly chaotic education as a ward of Jordan College produces the same conditions of unorthodoxy of thought. As a result of this shared unorthodoxy new insights naturally arise that produce theories that make sense of multiplicity and order. Whereas Mandelbrot suggested the fractal as pattern the labyrinth/maze more readily discloses the tensions between stability and instability in nature, and their chronotopic connections in *Materials* and mythology.

[566] Pullman, *Subtle Knife*, p.97.

Chapter Nine

Eco-labyrinths and alternative Edens

The previous chapters suggest that the labyrinth provides a way to read structural patterns in the text that establish concepts of ecological 'authenticity.' In this chapter I bring the texts together to assess the presentation of exemplary ecological environments, and the ecological virtue of their architects.

David Parkin suggests that the nature of the rite of passage 'presuppose phasal movement, directionality, and positioning. Since it is through such movements and positions that participants make statements both about the world and about the ritual itself.'[567] The quest in *Rings* makes a statement through its mirroring of the ecological design of Middle-earth; the rhythmic echoes of its creation through music, the fixed cycles of its planets and seasons. Repetition of theme reflects the accumulation of knowledge, while the revolving nature of the quest leads inexorably inward toward illumination. Likewise, the return journey follows the same circuitous route back to the start, where the iterative cycle begins again with the refrain of a localised struggle for renewal. The structural model evokes the unicursal labyrinth and its ritual significance as reflective of subjugation and assimilation with a fixed scheme. The unicursal labyrinth model shares the growth, regularity and renewal features of McCoppin's cycle of nature, while identifying it as contiguous with mythology and Christian redemption. It also differs from the cycle of nature due to the tension between the unicursal, fixed, identification of authenticity alongside a

[567] David Parkin, 'Ritual as spacial direction and bodily division', in *Understanding Rituals*, ed by Daniel de Coppet (London: Routledge, 1992) pp.11-25 (p.12).

multicursal alternative. In this way the eco-labyrinth reconciles the paradox of cyclical and evolutionary definitions of ecology.

Materials comprises a quest where illumination and renewal reflects the dynamism of an evolutionary model of ecology that resists attribution to a single author and an immanent order. The joint heroes Lyra and Will, and other characters actively engage with and affect the construction of an ecological future. They set out a model for action that questions order, rejects stasis and validates change. An evolutionary teleology informs the nurturing and survival of intelligent life, through their passage from innocence to experience. The quest acts to substantiate the authenticity of this multicursal model against the rival claims of a fixed order predicated upon subjection to out-dated and limiting principles.

Both texts recall the myth of the Fall and thus potentially offer solutions to White Junior's challenge to rethink Christian mythology in order to engender a less anthropocentric orientation. Consistent with theoretical definitions of the quest hero the protagonists engage with sympathetic figures with knowledge that contribute to the fulfilment of the quest. In this chapter I turn to look at how the an eco-labyrinthine reading of orientation of each text exposes inconsistencies in their allusions to Edenic ecologies.

The chapter evaluates virtue based on the reflection of labyrinthine principles in its representation of manufactured environmental idylls. In *Rings* the immortal elves appear to live in utopian harmony with nature, in *Materials* the Edenic appears

through the mulefan civilization. However, in each instance labyrinthine analysis raises questions over structural inconsistency.

It is natural to commence an analysis of ecological virtue with Tolkien's elves as they most clearly possess an affinity for nature through their natural abode lying within labyrinthine woods and forests. In chapter one I outline how Paul Santmire locates a dyad within Christian theology and nature, between motifs that disclose ecological order and spiritual motifs that validate nature by association. Santmire suggests that these motifs can each apply at the same time, to a greater or lesser extent, and thus lead to confusion. These principles I will argue apply to the ecologically virtuous and spiritual elves.

In *Rings* we encounter three elven environments, each of which provides a temporary sanctuary for the questers at times of great need. The three encounters are spread across the trilogy. The first appears within the borders of the Shire, the other two appear on either side of the Misty Mountains. As such the arrival at each location fits within the labyrinthine scheme of disclosure by repetition at intervals, and progress that moves through the rite of passage to mark separation, illumination and union.

We are meant to perceive the elves as pure and virtuous beings, intrinsically good, powerful and incapable of evil. Preceding their first appearance in the chapter entitled *Three is Company*, Sam who has previously expressed an awed wonder of elves asks if they live in the woods ahead. This leads to the disclosure that it was unheard of, while Frodo falls apparently unbidden into a rhyming reverie

philosophising about the road as a ‘great river’ into which all other paths feed as tributaries.[568] The conjunction of the questers and elves on this unicursal path marks an intersection between them but the elves remain on a parallel course, declining to directly intervene in the quest.

When the meeting with elves later takes place it saves the hobbits from their first brush with an evil ringwraith, further cementing the impression of the elves as a force for good. The purity and clarity of elven voices rising toward the starlight disturbs the ringwraith, bent over in the dark blindly following the scent of the hobbits.[569] The contrast of clarity and goodness with confused searching works as a binary to elevate the elves. The elves’ heightened senses enable Gildor to locate the hidden hobbits and he hails Frodo immediately by name.[570]

This first encounter discloses diversity among the elves. The hobbits recognise their rescuers as ‘high elves’ of whom ‘Not many now remain in Middle-earth’[571]and they subsequently address the elves respectively as ‘fair people’,[572] “Wise People’[573] and ‘Fair Folk.’[574] These elves go on to describe themselves as ‘exiles’, gradually withdrawing from the concerns of Middle-earth pending their physical departure across the sea to The Blessed Realm.

[568] Tolkien, *Rings*, p.72.
[569] Tolkien, *Rings*, p.77.
[570] Tolkien, *Rings*, p.78.
[571] Tolkien, *Rings*, p.78.
[572] Tolkien, *Rings*, p.78.
[573] Tolkien, *Rings*, p.79.
[574] Tolkien, *Rings*, p.79.

Gildor, the elven group's leader, contemplates whether the meeting was 'by chance or purpose.'[575] When the elves take the hobbits into safe-keeping for the night they secrete them within a woodland fastness, reached through a winding path described as 'A green ride…almost unseen through the thickets (which) wound away back up the wooded slopes on to the top of a shoulder of the hills that stood out into the lower land of the river valley.'[576] The immortal elves hint at a longstanding association with the hobbit's country as Gildor observes 'it is not your own Shire… Others dwelt here before hobbits were; and others will dwell here again when hobbits are no more.'[577]

Structural labyrinthine features, of the parallel course leading to adjacent points, and a circuitous path leading upwards toward a hill top illuminated by the stars, speaks eloquently of the elves spiritual status. Their departure during the night while the hobbits sleep reflects their separation from the earthly plane and its concerns.The temporary nature of elven assistance highlights to the hobbits that they are themselves ultimately responsible for undertaking the quest to save Middle-earth. The indifference to Frodo and the gravity of his situation the high elves exhibit underlines their fallibility; they are neither omniscient nor omnipotent.

Their disdain for earthly matters suggests that the high elves are motifs of spiritual rather than ecological virtue. The clearing they lead the hobbits to stands above the hobbit village of Woodhall. The place name echoes the ancient use of the place by elves before hobbits established their own settlement, a further link to prosaic and spiritual residing adjacent to each other. Whereas later depictions of elven

[575] Tolkien, *Rings*, p.83.
[576] Tolkien, *Rings*, p.80.
[577] Tolkien, *Rings*, p.82.

settlements depict trees as sacred and avoid mention of them as a resource, the high elves participate as partners in the exchanges that comprise a living eco-system. The place they lead the hobbits to comprises a managed environment that maintains a clearing open to the heavens. There are no accounts of how the elves have collected wood for their fire. They might have used fallen, or coppiced, branches. However the text reveals that trees have been felled here and the elves are depicted as sitting around 'upon the sawn rings of old trunks'[578] making merry. The elves are not directly identified as the woodcutters but neither do they baulk at the felled trees, or mourn their loss.

Unlike the fixed elven kingdoms that we encounter later the nomadic elves accept their place within a wider, balanced cycle of nature. Their own impact on the environment is reduced by a transitory lifestyle that itself evokes the impression of labyrinthine progress, with its' revisiting of places separated by intervening time, and progress toward a spiritual centre. They convey the impression of spiritual beings that are only incidentally ecological, as once they reach the Blessed Realm they will not return to complete the labyrinthine cycle of renewal. In this respect the high elves appear to represent separation, the first stage in an overall rite of passage fulfilled in the two further encounters with elves.

The next encounter with elves takes place at another point of desperation. The chapter *The Flight to the Ford* culminates with the potentially mortally wounded Frodo in a race to reach the elven enclave of Rivendell; the kingdom of the half-elven Elrond, who alone possesses the ability to heal the hobbit. A number of factors

[578] Tolkien, *Rings*, p.80.

combine to identify Rivendell as foremost a spiritual rather than an ecological realm. Frodo's dramatic entry requires him first to reject the ringwraiths' overtures before crossing the ford that serves as the boundary between Middle-earth and the elven enclave. Thwarting the Riders' attempt to continue the pursuit, the cleansing powers of the flood of Bruinen are unleashed, which sweep them away. The inauthentic elements of the flood, the image of white horses, are bells and whistles added by Gandalf. This imagery of white horses ranged against black steeds does however lend a binary significance to the struggle at the border between light and dark. By contrast within the borders of Rivendell all is light, struggle as the basis of balance disappears, which magnifies its significance as symbolically spiritual rather than ecological.

Arrival at Rivendell marks the end of book one of the trilogy. Book two opens with the chapter *Many Meetings* which reflects the second stage in a rite of passage toward understanding, that of illumination. The prolonged hiatus in Rivendell centres on the following chapter, *The Council of Elrond*. Tom Shippey recognises Tolkien's skill in including detail in the meeting that does not directly relate to the matter in hand but in the wider quest, 'these gaps, loops, and meanders do not seem tedious, and indeed are usually not noticed.'[579] The Council generates knowledge through cyclical revealing. Revealing includes the unmasking of Strider, the uncovering of the history of the ring, and news reports from all in attendance. The manner of disclosure suggests a labyrinthine reasoning that may reflect the wisdom of the elves.

[579] Shippey, *Author*, p.80.

Tolkien uses the space afforded by the hiatus in the plot to cultivate an understanding of the qualities of Rivendell, found in its environmental characteristics. Rivendell refers to the whole valley of the elven kingdom. Tolkien depicts the recovering Frodo admiring Rivendell's wooded environs. We learn of his desire to walk among the woods in detail extraneous to the plot as at no point does the narrative recount Frodo actually doing so.[580] Rivendell appears suspended in time as if asleep. As a house of laughter and carefree timelessness it justifies its identification as 'the Last Homely House east of the Sea'[581] of which 'Merely to be there was a cure for weariness, fear, and sadness.'[582] Rivendell reflects theories about the therapeutic effect of the environment explained in environmental psychology. Rachel and Stephen Kaplan's work on restorative environments identifies a number of complementary restorative environmental components. Respectively: escape from the travails of everyday life and its stresses; extent, through being an independently viable yet accessible locale; fascination, as an environment that remains undemanding and unobtrusive; and compatability between the individual and their environmental setting.[583] The Kaplans also identified informational factors[584] that Karin Laumann et al note have been influential in subsequent research into restorative environments, forming two additional sub-elements of mystery (as a sub-set of fascination) and coherence (a subset of extent).[585] These elements of restorative action work on the characters and provide

[580] Tolkien, *Rings*, p.233.
[581] Tolkien, *Rings*, p.219.
[582] Tolkien, *Rings*, p.219.
[583] Rachel Kaplan and Stephen Kaplan, *The Experience of Nature: A Psychological Perspective* (Cambridge: Cambridge University Press, 1989), pp. 182-195.
[584] Kaplan, pp.54-57.
[585] Karin Laumann, Tommy Garling, and Kjell Morten Stormark, 'Rating Scale Measures of Restorative Components of Environments', *Journal of Environmental Psychology*, 21 (2001), 31-44 (p. 32).

the reader with an Arcadian appreciation of Rivendell through the elves associations with woodland and the outdoors in terms that are psychologically convincing. They identify the therapeutic utility and currency of the environment to our health and wellbeing.

Timelessness in the face of extreme danger marks Rivendell as an otherworldly, enchanted place and as such inauthentic. While geographically situated in the equivalent of the northern hemisphere at the end of October the air remains warm in the early evening. Flora un-seasonally persist in full bloom; 'the evening was filled with a faint scent of trees and flowers, as if summer still lingered in Elrond's gardens.'[586] The scorning of time extends to Frodo's uncle, original ring-bearer and mortal Bilbo who now resides here. Rivendell extends Bilbo's already exceptional longevity originally based on his stewardship of the ruling ring.

Tolkien points toward the mixture of joy and underlying sadness at Rivendell without ever becoming explicit about its deeper causes. The weight of history suggests that the eternal battle with evil waged by the immortal elves has demoralised them. As a consequence the elves withdraw from the world to boundaries within which they exercise control. Elrond exercises a hidden power over the environment through his wielding of one of the elven rings of power, whose potency relies upon the existence of the ruling ring that must be destroyed.

Another unnatural element that separates immortal elves from the cyclical, labyrinthine world of cyclical renewal is the unspoken absence of elven children. In

[586] Tolkien, *Rings*, p.220.

order to maintain the balance of their artificial eco-system as immortal beings, the elves appear to have been forced into making demographic choices. Tolkien's wider mythology of Middle-earth identifies Elrond as having lived continuously in (and managed) the environment of Rivendell since he founded it in the year 1697 of the Second Age.[587] By the time that Frodo arrives in the Third Age over three thousand years have passed.

After the council ends, and the company of the ring is formed, a further hiatus justifies the extension of the stay in Rivendell. The explanation for this incongruity lies in the despatch of scouts to gather intelligence. The situation might be expected to breed anxiety, yet the sense of place negates this entirely. However the break in the quest of two months from 20th October to 25th December not only reflects the immortal elven ambivalence toward time it also ensures that the newly defined quest to destroy the source of fallen nature coincides with the date of Christ's birth. Winter is at hand when the company leave, which serves as a portent of Rivendell's reintegration into the scheme of time as a consequence of the quest.

A similar reunion with the authentic cycles of Middle-earth concludes the final encounter with elven ecology, at Lothlorien (The Golden Wood). Here the elven relationship with nature is most pronounced and profound. Parallels appear between Edenic loss and elven history. A labyrinthine path guides the questers' passage that will also inform the elves own journey towards re-union and redemption. Recalling previous encounters with elves admittance to the elven plane marks a descent into faerie permissible only to those in great need. Lothlorien has a folktale reputation as

[587] Matthew Dickerson, Rivendell, in *J.R.R. Tolkien Encyclopedia: Scholarship and Critical Assessment*, ed. by Michael D.C. Drout (Abingdon:Routledge, 2007), p.573.

a place where people disappear and if they re-emerge do so having been transformed in some way. Lothlorien comprises another of the texts internal labyrinthine parallels, by recalling the warnings about entering the Old Forest. It stands in contrast to the more accessible realm of Rivendell. The secretive, hidden elves of Lothlorien carry a greater sense of otherness about them. Even Legolas, an Elf of Mirkwood, knows only of a legendary Golden Wood with a reputation for unmatched silver and gold trees. A sense of Lothlorien as unique develops cultivated through the impression of a sacred place. The stream Nimrodel marks the physical boundary between the elven realm and Middle-earth. It runs toward a waterfall where light shines through it to form a rainbow. This forms one of two references to rainbows in *Rings* that symbolically form a bridge between heaven and earth. The melodic notes of the running water of Nimrodel echo Middle-earth's myth of creation through musical composition.[588]

Parallels with the Old Forest abound. The environments share: the same atmospheric marker, a golden haze; the suggestion that the whispered rustling of leaves evidences consciousness through communication; hostility toward a group perceived to be an enemy; in each wood footsteps are directed leading through gradations to a concentrated essence of the forest at its true centre; the pseudo-stewards Bombadil in the Old Forest and Galadriel in Lothlorien each reside outside the centre reflecting ecological separation in a fallen world.

The stage of separation in rite of passage as articulated by the Christian labyrinth comprises purgation of sin. Just as in the Old Forest, the questers surrender control

[588] J.R.R.Tolkien, *The Silmarillion*, 2nd edition, ed by Christopher Tolkien (London: Unwin Paperbacks, 1983) pp. 15-17.

over direction of travel; in this case bowing to the demands of the elves who wish to blindfold the dwarf Gimli, reflecting the enmity that had arisen between elf and dwarf. In solidarity with the dwarf the entire company submit and only once they have fully accepted this loss of control do the questers open their mind to other senses through which to experience more sharply the ecological idyll. The elves guide progress to an environment that retains a remnant of the authentic, 'Elder Days…a world that was no more.'[589]

Having made a penitential journey the elves release the company from their blindfolds, beginning with the dwarf's in admission of their own misplaced distrust. The interaction acknowledges the elves as fallible and also penitent. Purgation seamlessly leads into illumination as the bindings are removed at Cerin Amroth the ancient heart of Lothlorien, which engenders an elevated sense of nature; 'it seemed to (Frodo) that he had stepped through a high window that looked on a vanished world.'[590]

The environment before them comprises an opening or glade within the forest where a double circle of trees stands atop a turf mound. The turf mirrors the cosmos by being 'studded with small golden flowers shaped like stars.'[591] Additional commentary identifies the site as the original or authentic heart of the elven dwelling of Lothlorien, eternally in bloom. The questers intuitively perceive their surroundings as pristine, pure and unadulterated. Amroth, while retaining its significance to the elves, yet lies abandoned. Aragorn pauses here in reverie befitting the significance

[589] Tolkien, *Rings*, p.340.
[590] Tolkien, *Rings*, p.341.
[591] Tolkien, *Rings*, p.341.

of Amroth in the wider legendarium as the place of his betrothal to the elf princess Arwen.[592] Their eventual union will serve as the return to rightful order, with Edenic allusions, as Arwen foregoes her immortality as part of the redemptive process of reversing Middle-earth's fall.

The symbolic significance of passage into Lothlorien as a return to an original arcadia now abandoned infers a lost authenticity. Yet empathy between elves and nature remains, in a mutually symbiotic relationship between them and a suitably singular genus of faerie tree, the mallorn. The elves protect the trees while the trees' trunks 'divided near the top into a crown, and here the (elves) built their (dwellings).'[593]

When Frodo climbs the sacred mallorn at Amroth he undergoes an epiphany. He can physically feel the life-force coursing through the tree and had 'never before …been so suddenly and so keenly aware of the feel and texture of a tree's skin and the life within it.'[594] The substitution of bark with skin highlights the revelatory nature of the encounter between hobbit and tree, fauna and flora. Frodo perceives 'a delight in wood and the touch of it, neither as forester nor as carpenter; it was the delight of the living tree itself.'[595] What was at first perceived as an object or resource becomes consciously transformed.

The next chapter, *The Mirror of Galadriel*, opens with the journey to Lothlorien's new capital Caras Galadhon. Whereas Amroth was bathed in the light of the sun at its

[592] David Day, *A Guide to Tolkien* (London: Chancellor Press, 2001), p.38.
[593] Foster, *Guide*, p.246.
[594] Tolkien, *Rings*, p.342.
[595] Tolkien, *Rings*, p.342.

zenith by contrast the company reach Galadhon the 'city of the trees'[596] at dusk wreathed 'in soft shadow, but the grass upon its brink was green, as if it glowed still in memory of the sun that had gone before.'[597] The poetic diction invites a more than literal take on the sunset extending its significance to the fading end of the days of the elven kingdom in its guise as a new city.

Galadhon comes into view as a vast fortress edged with a ring of enormous mallorn trees that comprise 'a green wall encircling a green hill.'[598] The single entry point emphasises defensibility, size and layout, as the company trudge at length around the city's edge as night draws in before they eventually reach barred gates. The single entrance and the green circuit give the outward impression of an ecological labyrinth. Within however the company proceed along many paths and up many stairs lending the interior a multicursal aspect. They ascend in this way to the summit where they find a fountain and the largest of the trees, the dwelling place of the lord and lady of the Galadhrim. The elves have withdrawn here as a refuge against the world forsaking their Edenic original capital.

The nature of illumination in the court of Galadriel reflects the uncertainness of the future. Galadriel's magic mirror, a basin filled with water, functions as an oracle. It provides glimpses of the past, present and of what might possibly come to pass. Galadriel underlines the untrustworthiness of the vision of the future in her warning that events might only come to pass by the person viewing the image trying to

[596] Foster, *Guide*, p.62.
[597] Tolkien, *Rings*, p.344.
[598] Tolkien, *Rings*, p.344.

prevent it by turning aside from their path. The mirror opens up possibilities and the prospect of alternative futures and realities. When Sam uses the mirror it does however provide what will subsequently prove an accurate premonition of the environmental destruction of the Shire that leaves him distraught. He resists the overwhelming temptation to quit the quest only with great difficulty, in order to pursue the objective of tackling the cause for disharmony rather than one of its symptoms.

Through the reflection in the mirror the reality of choice and freewill intrudes into Lothlorien. When the eye of the dark lord appears as Frodo peers into the water it acts as a reminder of the prospect of encountering evil or of going astray. Galadriel at this point reveals she bears 'Nenya, the Ring of Adamant' [599] as she rejects the force of evil that also insinuates its way into her own mind. The presence of one of the elven rings, through which the dark lord tricked the elves into subordination to the ruling ring he once held and seeks to recover reprises the theme of the Fall. The possession of the ring highlights the fallen nature of the elves, already suggested by their retreat from the Edenic Cerin Amroth, and leads to Galadriel's redemptive act in refusing Frodo's offer of the ruling ring. Instead she chooses self-sacrifice and surrender to the cyclical yet progressive course of nature that the ring has been holding at bay. In this way the elven fall is undone through the conscious choice of Galadriel which proceeds from the feminine qualities of reflection and intelligence over force. Galadriel's decision recalls and redeems the figure of Eve as part of a rite of passage that leads to (re) union with authentic nature. Galadriel's diminution of power signals the return of Lothlorien to the cycles of nature and mortality. She

[599] Tolkien, *Rings*, p.356.

immediately and abruptly announces that the time has now come for the quest to continue. As the company depart from Lothlorien, *Rings* figuratively describes the dam holding back the waters of time having broken. Leaving by river the company are met for one last time by Galadriel but now she appears as 'a living vision of that which has already been left far behind by the flowing streams of Time.'[600]

Unicursal eco-labyrinthine principles reflect a holistic order that includes movement and subordination to natural patterns that bring about enlightenment and renewal. The elves development of inauthentic albeit 'improved' environments represents a rejection of natural order. They act as exemplary ecological figures through their reintegration and re-union with Middle-earth based on surrendering power. Their attempts at recreating Eden as a fixed, spiritual environment are shown to be inauthentic when transferred to Middle-earth. The true home of the elves and their static model of ecology lies outside the circuits of Middle-earth. Ecology emerges strongly as a process not a place, and as ambivalent to the environment that the elves create.

If the eco-labyrinth as an expression of natural cycles, progress, death and renewal as a sacred structure undermines the ecological virtue of Tolkien's elves then Pullman's pseudo-Eden also contradicts the multicursal labyrinthine model that otherwise articulates reality in *Materials.* Progress towards an Edenic setting in Materials follows a multicursal labyrinthine route, requiring intellect to decipher esoteric signs. The scientist, a former nun who has rejected God, Mary Malone leads the reader to a strange new world where evolution has taken an alternative turn.

[600] Tolkien, *Rings*, p.364.

Using the divination techniques of the IChing,or 'the Book of Changes, as it was called'[601] she employs a guide to communicate with the divine rooted in a non-Christian religion, via a method that had been shown to anticipate the advent of the computer.[602] Through this she pursues 'the mazy paths it led her on'[603] to an enigmatic clue. Taking an educated guess she ascends a mountain to the opening to another new world.

The passage Mary takes leads into the world of the mulefa, where she finds 'Wide golden light, and an endless prairie or savannah, like nothing she had ever seen in her own world.'[604] She discerns massive trees, twice as tall as the highest redwood trees, bearing luxuriant foliage atop 'vast trunks gold-red in the heavy evening light'[605] while the indistinct outline of strange herds appear in the far distance. Before sleeping Mary finds a trickle of 'clear water from a mossy fissure, and a tiny stream…She drank long and gratefully.'[606] The care taken to describe the environment as a place of natural wonder, verdant vitality, purity and restful safety infers that the ecological environment here remains unspoilt.

This world will provide the platform for reprising the Fall and Mary will facilitate Lyra and Will's passage here from innocence to experience. The text alludes to this as, on waking, Mary 'lay for a few minutes lapped in freshness, as if she were the first human being who had ever lived.'[607] As such the environment appears both familiar

[601] Pullman, *Amber Spyglass*, p.84.
[602] Pullman, *Amber Spyglass*, p.84.
[603] Pullman, *Amber Spyglass*, p.84.
[604] Pullman, *Amber Spyglass*, p.86.
[605] Pullman, *Amber Spyglass*, p.86.
[606] Pullman, *Amber Spyglass*, p.87.
[607] Pullman, *Amber Spyglass*, p.87.

and new, it also depicts an emphasis on bio-diversity as a marker of ecological health:

> The grass was knee-high, and growing among it there were low-lying bushes, no higher than her ankles, of something like juniper; and there were flowers like poppies, like buttercups, like cornflowers, giving a haze of different tints [608]

Mary espies what she believes to be a large bee then discovers it to be a miniature hummingbird which 'perched on her finger, dipping a long needle-like beak against her skin with the utmost delicacy…taking flight…when it found no nectar.' [609] Later when the villainous Father Gomez arrives in the same world the text describes him as struck with:

> the sound of some cicada-like creatures in the long grass and the setting warm sun in his face. The air was fresh, too, clear and sweet and entirely free of naphtha-fumes, kerosene-fumes, whatever they were, which had lain so heavily on the air in one of the world's he'd passed through: the world…the tempter herself, belonged to [610]

Having established and reinforced images of ecological health the text establishes the position of the mulefa at the apex of the ecology of the environment. Mary's attention first focuses on a herd of strange quadrupeds with two parallel legs in the

[608] Pullman, *Amber Spyglass*, p.87.
[609] Pullman, *Amber Spyglass*, p.88.
[610] Pullman, *Amber Spyglass*, p.387.

centre of their body with a single leg to the front and rear. These creatures show no fear of her, betraying a semi-domestication, which becomes linked to a lack of curiousity and intellect. Mary's scientific mind makes sense of the strange new world as verification of 'the multiple worlds predicted by quantum theory…clearly in this world evolution had favoured enormous trees and large creatures with a diamond-framed skeleton.'[611] The presence of the strange herbivores fits with the grassland environment. Mary's interest in this new species only extends as far as their use as a commodity once she meets the mulefa, who physically share the same skeletal form but are distinct by virtue of their intelligence as 'fully-conscious' beings. As a result the herbivore species are not assigned a name and throughout are referred to as 'the grazers.'

The mulefa appear on the scene to Mary's incredulous eyes 'like a motorcycle gang. Then she thought it was a herd of wheeled animals. But that was impossible. No animal could have wheels.'[612] Yet these creatures 'with horned heads and short trunks like elephants'… somehow…had evolved, on their fore and rear single legs, a wheel. But wheels did not exist in nature her mind insisted…it was impossible.' [613] On closer inspection she finds that the mulefa ride on wheels made from the seedpods of the gigantic trees. The depiction intersects with scientific and religious arguments over evolution and illustrates ecological connectivity and harmony through evolution acting in concert with conscious creativity. In *A Pilgrimage to the Dawn of Life: The Ancestor's Tale* (2004) Richard Dawkins' makes reference to Pullman's depiction of the mulefas' adaptation of the wheel as an imaginative way of

[611] Pullman, *Amber Spyglass*, p.90.
[612] Pullman, *Amber Spyglass*, p.91.
[613] Pullman, *Amber Spyglass*, p.91.

assimilating the wheel into the narrative of evolution.[614] Dawkins' contextualises Pullman's imaginative creation of symbiosis of animal and wheel within the debate between evolutionary theorists and proponents of intelligent design. The latter have challenged evolution on two fronts related to the wheel. Firstly, that the absence of animals with wheels disproves evolution as such a useful design should have evolved. Secondly, that where the wheel has evolved in bacterial matter the complexity of interactions required to arrive at this form preclude evolutionary origins and can only be accounted for as an illustration of intelligent design.

The physiognomy of the mulefa then in itself assumes significance. However a deeper significance lies in the taxonomical methodology Pullman employs to establish hierarchy across his myriad worlds. V.V. Sivarajan writes of the fundamental role of taxonomy in science in how it informs understanding of kinship and hierarchy.[615] *Materials* establishes a relationship between life forms on the basis of consciousness and creativity. In so doing it substitutes biological links for cultural ones to create a sense that the mulefa are in Mary's words essentially granted the status of 'people.'[616] The erosion of the biological links appears though the identification of a process of cladogenesis, i.e. where an event splits one genetic grouping into two distinctly different taxonomical classes. This happens in *Materials* when the mulefa discover dust and as a result develop full consciousness and the ability to subcreate. The mulefan's explain this through a myth that closely resembles

[614] Richard Dawkins and Yan Wong, *The Ancestor's Tale: A Pilgrimage to the Dawn of Life* (London: Weidenfeld and Nicolson, 2016), pp. 630-631.
[615] V.V. Sivarajan, *Introduction to the Principles of Plant Taxonomy*, 2nd edn (Cambridge: Cambridge University Press, 1991), p. 3.
[616] Pullman, *Amber Spyglass*, p.129.

that of the Fall, transformed into a celebration of consciousness, choice and evolution.

The text depicts mulefan ecological virtue through the mutual symbiosis of their relationship with the giant trees. Mulefa and tree combine to serve the needs of one another. The grazers, as not fully conscious, legitimately serve the mulefa as foodstuff and resources. The biological links between them having been broken, presumably accounts for and justifies the mulefa's dominion over the grazers. Having told us they were originally related this subservience of the grazer to the mulefa finds its most stark expression in the mulefa abandoning their original state of herbivore to become omnivores with no qualms over killing and eating their evolutionary kin. Knowledge and growth here then inverts the peaceful co-existence of the biblical Eden. The mulefa illustrate their ecological virtue in their selection of the weakest of the grazers for slaughter and in the use they find for every element of the grazers' bodies. These serve as meat, materials and toys.[617] The formation of this trope within a redrawn hierarchy has unpleasant echoes. The mulefa attain the status of an intellectual master race. The implicit revision of taxonomy can be read against Edenic relationships in concert with Kathleen Kete's identification of a dichotomy in rationale in the development of animal protection in Europe.[618] Kete contrasts two significant points in animal protection comprising 'the first animal protection law, and the most comprehensive set of laws'[619] the first influenced by Christianity, the second by Social Darwinism.

[617] Pullman, *Amber Spyglass,* p.134.
[618] Kathleen Kete, 'Animals and Ideology: The Politics of Animal Protection in Europe', in *Representing Animals*, ed. by Nigel Rothfels (Bloomington: Indiana University Press, 2002), pp. 19-34.
[619] Kete, p.20.

The first set of animal protection laws Kete identifies as the Puritan legislation of the English Protectorate of 1654, which are reprised in the Victorian era. These original Cromwellian laws claimed their rationale from the idea of human responsibility for the Fall from Edenic harmony with nature. The second set of laws Kete references reflect a revised taxonomy of species based on notions around the development of culture and the majesty of certain species grounded in mythology. These were the laws that the German National Socialists 'issued immediately upon the Nazi takeover of the German state in 1933 and which became the most comprehensive set of laws protecting animals in Europe.'[620] The German laws comprise a fundamental redrawing of hierarchy to establish 'a new paradigm…which placed certain species – races- of animals above "races" of humans –eagles and wolves and pigs in the new human/animal hierarchy were placed above Poles and rats and Jews.'[621] Needless to say, Pullman does not go as far as the German National Socialists in redrawing hierarchy but he does produce a measure of difference allied to stereotype that as a homophone of daemon tends to demonise groups of people, i.e. those aligned with the church, the animal species they and other 'inferiors' project as endemic markers of character, and by extension the animals themselves.

The maze-like cosmology signifies the connections between worlds, eco-systems and their fragility when activity in one area leaks into another. However mulefan civilization constitutes a number of problems of inconsistency with evolutionary ecological structure in *Materials*. The example that 'proves' evolutionary development in imaginative terms eschews complexity and creates a balanced

[620] Kete, p.20.
[621] Kete, p.20.

system rather than a dynamic one. The mulefas betray highly specialised and dependent relationships with the trees. The human action to save the mulefas, and thus maintain the integrity of the Edenic environment, imposes an anthropocentric reasoning on nature. The lack of adaptability of the mulefas might mark them as unfit to survive in the face of a dynamic ecological reality. Saving the mulefan world represents re-balancing the precarious system within which they exist. They are shielded from change and protected because they attain the status of people. Yet the same process does not apply to the fantastic polar bears who act as direct helpers in the quest.

The polar bear evolves in Lyra's world into the panserbjorns (armoured bears). These creatures take the feral authenticity of the polar bear as their basis but are able to speak and develop a set of skills that match their innate martial character. The latter legitimises the bears' engagement in the battles they eventually wage on behalf of Lyra and her cause. While lacking a daemon, the true king of the bears Iorek Byrnison describes the armour that he crafts as representative of his true character. Without it 'I can hunt seals but I can't go to war; and I am an armoured bear: war is the sea I swim in and the air I breathe.'[622] He tells Lyra that without this armour 'I was incomplete'[623] and she recognises that his armour comprises a substitute for his lack of a soul/daemon. It also further reflects a sense of an evolving consciousness.

The bears' natural virtue emerges through the struggle between Iorek and the usurper Iofur Raknison who has seized his kingdom. This revolves around how an

[622] Pullman, *Northern Lights*, p.181.
[623] Pullman, *Northern Lights*, p.224.

armoured bear should relate to the world. Iorek restores polar bear identity and behaviour corrupted by human intrusion that was changing the way that bears behave.

The transformational human qualities of Iorek ostensibly account for his value to the plot but at the same time we are reminded repeatedly of his natural wildness; 'They tell me this is cold. I don't know what cold is, because I don't freeze. So I don't know what lonely means either. Bears are made to be solitary.'[624] As bears are solitary Iorek appears to be a contradictory figure as leader of the bear kingdom, and equally subject to its rules. As spokesperson for the independent bears Iorek, like Treebeard in *Rings*, refuses to take sides on principle as no one is entirely on his side. Will asks; 'I thought there wasa great war coming that would involve everyone. Which side would you fight for in that case?' To which Iorek replies 'The side that gave advantage to the bears. What else?'[625]

Paradoxically Iorek's statement contradicts the action he eventually takes. The polar bear remains fixed to a particular place, the now degraded polar region. It cannot elude this by travelling elsewhere on earth. When asked to mend the subtle knife that cuts passages through worlds and has caused this malaise Iorek frames his assistance with 'one condition…Though I feel it is a mistake. My people have no gods, no ghosts or daemons. We live and die and that is that…but we have language…and use tools; maybe we should take sides.'[626] Iorek reconciles his reasoning through his elevated consciousness. The condition he sets for recasting

[624] Pullman, *Northern Lights*, p.222.
[625] Pullman, *Amber Spyglass*, p.117.
[626] Pullman, *Amber Spyglass*, p.192.

the knife legitimizes its renewal in broader cosmic terms. He asks Lyra to enquire with the alethiometer (truth compass) whether it should be recast. The compass oscillates as it weighs up the good against the bad consequences until it ultimately rules that it should be fixed. In accepting this Iorek accepts a higher ecological purpose and the extinction of creatures unable to adapt to the ecological changes that includes the polar bears.

Chapter Ten

Conclusion

This study of two twentieth-century quest fantasy texts uncovers layers of meaning found in narrative structure that reflect divergent perspectives on the structure of ecology. The order and regularity of the unicursal labyrinth fits within a fixed scheme of ecological design. The multicursal maze speaks of authenticity located in dynamism, change, and an evolutionary conception of ecology. The labyrinth dichotomy captures the tension between polemical positions in ecocriticism and illustrates and exposes them via a readily accessible paradigm, which draws out their strengths and weaknesses. The application of an eco-labyrinthine analysis reveals and explains meaning embedded in narrative structure and images that might otherwise go unnoticed. The approach reconciles the labyrinth in its alternative forms as valuable in exposing weaknesses in fundamentally polemical ecocritical positions and exposes inconsistencies of application. In concentrating on meaning embedded in structure we trace a broader historical legacy through the figure of the labyrinth as the revising and re-working of an essential monomyth. The study reveals the labyrinth as a potent expression of Janus-faced tensions about choosing our direction of ecological travel.

As the study has illustrated, Tolkien and Pullman's respective value judgements and preferences align to ecological structures that resist attempts to inscribe ecology within a single structural model. Each author struggles with this reality that intrudes into their text. Through the eco-labyrinth ecological structure emerges as multi-faceted, at times contradictory, and ambivalent to humanity's desire to confine it

within a single identity. In focussing on structure, I wished to move away from McCoppin's approach to identifying ecological virtue measured solely through the quest hero. This was a matter of choice, so as not to detract attention from the wider significance of a structural ecological model and its application as an active influence on the text.

The heroism of Frodo and Sam in *Rings* and Lyra and Will in *Materials* has been partly disclosed in the foregoing discussion of the ecological explanation of their quest experiences. If we look first at *Rings*, and its unicursal labyrinthine model of fixed cosmological design, the quest hero ultimately fails at the very end to do what he set out to accomplish. Salvation appears through fate, with the ultimate struggle to relinquish illicit, transformative power articulated through the fight between Gollum and Frodo at Mount Doom. Frodo loses a part of himself with the loss of power, both physically and metaphorically. In reflecting biblical Fall and redemption, Frodo's example of heroic failure appears in the final turn of the labyrinthine corner, and illustrates Tolkien's concept of 'eucatastrophe'; the unexpected victory of good through a catastrophic event. The conclusion acknowledges the difficulty of relinquishing power for the greater good. It also ensures that while *Rings* echoes biblical redemption it does not set up Frodo as a rival figure to Christ. However, I would argue that Frodo mirrors the elves' relationship with nature as a result of undertaking the quest, in that he provides an example of a spiritual rather than an ecological awakening.

Ecological heroism more clearly applies to the companion heroic figure of Sam, whose loyalty in following Frodo's spiritual journey provides a complementary

perspective to the quest, focused on nature. Whereas union will be found in the spiritual realm for Frodo, through his departure from Middle-earth with the elves, Sam's re-union comprises the task of ensuring the ecological renewal of the Shire. His role of gardener marks a return to the Adamic role of duty to nature. Sam also illustrates the renewal of the Shire in his own fecundity, reflecting the vitality of nature through the continuing cycle of future generations. The unspoken shadow of continuing struggles, between maintaining balance and exceeding natural boundaries, looms however in the potential impact of hobbit population expansion on its environs.

Materials similarly ends with an apparent contradiction with the realisation of the heroes that to save all other worlds they must learn to live in their own. This reintroduces limits and the understanding that fixed boundaries safeguard the integrity of the multiverse. Nevertheless a desire to break free of boundaries remains. While Lyra relinquishes mythological tools the text hints that she may reopen boundaries through the cultivation of legitimate knowledge through science.

I have included in my analysis how Tolkien and Pullman insert their own ecological views into their respective quests. These views reflect cultural and religious preferences that relate each text back to the culture that produced the Anthropocene Age. Therefore my research looks beyond authorial intention to position *Rings* and *Materials* as texts in a long history of literature, stretching back from the present to the origins of the Western tradition, that reflect thinking about ecology, biodiversity and environmental damage caused by human beings. An eco-labyrinthine reading offers a way of reassessing these chosen works of fiction and illuminating their

ongoing importance to twenty-first century environmental critique. In doing so, it attends closely to ways of thinking about the Anthropocene that take into account Christian and other theological environmental thought based on the biblical book of Genesis.

The approach I have taken in discussing eco-labyrinthicity was chosen in the interest of unity in my enquiry. My analysis could have engaged with alternative contemporary ecocritical theories. For example, monster theory which examines cultural echoes of non-human power, transgressions of ecological order, and lends itself to reimagining the labyrinthine Minotaur figure. [627] In this sense the monstrous can also be 'a code or pattern or a presence or an absence that unsettles what has been constructed to be received as natural, as human.'[628] Another approach might have been to utilise Rob Nixon's work on *Slow Violence and the Environmentalism of the Poor* (2011) to focus on the long-term, underlying threat in the gradual erosion of an ecological structure in contrast to acts of immediate violence, and the capacity of the disempowered to resist according to their understanding of that structure.[629] Eco-labyrinthicity similarly fits with Nixon's call for 'devising iconic symbols that embody amorphous calamities as well as narrative forms that infuse these symbols with dramatic urgency.'[630] This sense of urgency emerges in the tension within the labyrinthine dichotomy between authentic and inauthentic ecological models, and the choices between them. The eco-labyrinthine in its aspects as both microcosm and

[627] Jeffrey Jerome Cohen, ed by, *Monster Theory: Reading Culture* (Minneapolis:University of Minnesota Press, 1996)
[628] Jeffrey Jerome Cohen, 'Preface: In a Time of Monsters', in *Monster Theory: Reading Culture* (Minneapolis:University of Minnesota Press, 1996), ed by Jeffrey Jerome Cohen, p.ix.
[629] Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge, Massachusetts:Harvard University Press, 2011).
[630] Nixon, p.10.

macrocosm also identifies it as a symbol capable of connecting the local and global in a way which brings it within the orbit of Ursula K. Heise's work *Sense of Place and Sense of Planet: The Environmental Imagination of the Global* (2008). The eco-labyrinthine here helps us to explore the tensions Heise raises between stability and change related to place.[631] As a final example, an eco-labyrinthine engagement with Timothy Morton's *Dark Ecology: For a Logic of Future Coexistence* (2016) might engage in dialogue with Morton's critique of embedded structural ideas about the nature of ecology and his observation of 'how fundamental pattern making is to reality, because patterns are the basis of replication.'[632]

The eco-labyrinthine provides a new model for assessing the structure of narrative and ecology for texts in the Anthropocene based upon the tension between fixed labyrinthine and dynamic structures that reflect ecological perspectives on ecology. The structural and symbolic patterns found in *Rings* and *Materials* are not exclusive to these texts, and therefore an eco-labyrinthine approach can be used to provide an ecocritical reading of other quest literature. I provide in conclusion examples to illustrate the transferability of the approach and to consider where I might take my enquiries next.

I will begin by applying an outline eco-labyrinthine reading to Paulo Coelho's *The Alchemist* (1998), ostensibly a quest of self-realization, and of living an authentic life. Coelho also claims that its message includes 'to know that the Universe is conspiring

631 Ursula K. Heise, *Sense of Place and Sense of Planet: The Environmental Imagination of the Global* (Oxford:Oxford University Press, 2008), p.54.
632 Timothy Morton, *Dark Ecology: For a Logic of Future Coexistence* (New York: Columbia University Press, 2016), p.32.

in our favour, even though we may not understand how.'[633] The blending of personal and cosmic authenticity presents the fulfilment of the quest as having a twin purpose. The ecological significance of the quest is not readily apparent in a straight-forward examination of the text, but can be elucidated in eco-labyrinthine terms.

The Alchemist follows what appears at first sight to be an overtly cyclical narrative scheme. However a more sophisticated labyrinthine reading reveals a specifically ecological aspect to the quest. The protagonist Santiago sets out on a quest to find his fortune in response to a dream, and after a circuitous journey finds that the initial treasure he set out to find was where his journey had begun. Nevertheless, he had to undertake the journey in order to discover the treasure, and in the course of the journey we find a new, ultimate goal appears as a subtext, against which the treasure hunt appears to be subsidiary. Santiago's journey fits within an archetypal quest structure as he; emerges as singularly chosen to undertake the quest; undertakes an arduous journey; overcomes enemies; and is aided by the assistance of magical helpers. Santiago also displays unselfish heroism for the wider good, as his expedition turns into a *rite of passage* and enlightenment that preserves essential order.

A rich vein of eco-labyrinthine symbolism runs through *The Alchemist.* The quest hero is a shepherd in tune with nature, his steps guided by the course of the planets.[634] While walking his sheep in a broadly cyclical course he threads his way inwards toward the church where the story begins. His avoidance of walking the

[633] Paulo Coelho, *The Alchemist* (London:Harper Collins, 2012), p.ix.
[634] Coelho, *The Alchemist*, p.11.

exact route illustrates submission, as he allows his sheep to determine the path.[635] Thus the outline of Santiago's journeying fits within a natural, unicursally labyrinthine pattern. Recursive elements abound: he has a recurring dream; he meets a gypsy and later an old man who each offer to interpret his dream about the Pyramids, the latter in particular acts as a helper in appearing at a point when Santiago was about to give up on his dream. Instead Santiago gains encouragement and enlightenment from the old man with his dream given a sacred significance,[636] and intimation that a life's quest typically appears in childhood,[637] which points toward the authenticity of a state of innocence. The well-worn path of the labyrinthine rite of passage emerges as Santiago accepts the quest and embarks on the journey in Part Two of the book.

In following his dream Santiago leaves behind his life as a shepherd, in the countryside, travelling to Egypt and entering a modern urban environment, a place that reflects modern culture or progress. The city however emerges as a deceitful place, and he is robbed and left amazed and disorientated. He turns aside from his path and encounters others who have given up their own dream to make a comfortable living, albeit leaving them somehow unfulfilled and incomplete, at a dead-end. Necessity forces Santiago to work to replace the money stolen from him. He almost gives up his calling to return to his old life, but in retracing his steps to the shop where he was initially robbed Santiago determines to pick up the quest's course. Thereafter he meets an Englishman on a similar journey of enlightenment, who wishes to become an alchemist, to discover 'the one true language of the

[635] Coelho, *The Alchemist,* p.10.
[636] Coelho, *The Alchemist*, p.21.
[637] Coelho, *The Alchemist*, p.23.

universe'[638], who tells Santiago that 'When someone makes a decision, he is really diving into a strong current that will carry him to places he had never dreamed of.'[639] The Englishman also makes explicit the Christian symbolism of Santiago's own journey, in that he is using the only divinatory devices allowed by the Bible, in addition to the significance of his initial identity as a shepherd.[640] It is worth noting here that Coelho, like Tolkien, is both a deeply Christian and Roman Catholic author.

A labyrinthine reading enables us to understand the ecological aspect of the two companions' journey across the desert as members of a caravan. The desert represents an apparent wasteland, a wilderness, pathless, and subject to change in the shifting sands. The desert also serves as a humbling place where humanity realises through its absence our reliance upon the abundance of the natural world. The labyrinthine virtue of patience and heavenly submission emerge as the caravan navigates by following the position of the stars; 'We make a lot of detours, but we're always heading for the same destination.'[641] Santiago begins to recognise that life does survive in the desert and that the desert itself participates in determining whether the caravan should reach the oasis.[642] Labyrinthine knowledge about nature and our relationship with the world emerges through the interaction between Santiago and the Englishman. The latter aspires to become an alchemist because of his desire for power. When he shares his books on alchemy with Santiago the boy manages to simplify their message, seeing in them superfluous and confusing complexities hiding a pattern. Santiago disappoints the Englishman in apparently

[638] Coelho, *The Alchemist*, p.63.
[639] Coelho, *The Alchemist*, p.65.
[640] Coelho, *The Alchemist*, p.66.
[641] Coelho, *The Alchemist*, p.74.
[642] Coelho, *The Alchemist*, p.75.

trivialising his books by claiming that he had 'learned that these things are all so simple that they could be written on the surface of an emerald.'[643]

The desert that the caravan crosses emerges as a dangerous place due to on-going tribal wars, but also as a place where nature grimly sustains life. The oasis provides an unexpected centre to Santiago's quest as: a green Edenic environment; where there is an injunction against tribal warfare; and, as a place where he meets his future wife. Santiago also meets the alchemist there, that the Englishman had been seeking, who recognises Santiago as his true heir. Transgression and fall appear as Santiago reads signs in nature to foretell an attack on the oasis by warlords, and is held accountable with his life should his warning prove unfounded. This sacrificial aspect linked to an unnatural threat recalls the labyrinthine danger brought about by the Minotaur, transferred here to the monstrous transgression of evil men. The threat to the Edenic oasis (environment), the centre of the labyrinthine journey and point of illumination, comes not from a phantom creature but from fallen humanity.

Santiago continues to pursue his original quest to reach the Pyramids and discover his fortune/treasure. However in reading the quest as eco-labyrinthine we come to regard this culmination as subsidiary to the regaining of Edenic existence. The onward journey remains labyrinthine in nature, comprising 'tests of perseverance…If he pushed forward compulsively, he would fail to see the signs and omens left by God along his path.'[644] This quest journey ultimately proves cyclical in that at the Pyramids he learns that the treasure he searches for resides in the ruined church where he tended his sheep at the start of the book. The location serves to return

[643] Coelho, *The Alchemist*, p.79.
[644] Coelho, *The Alchemist*, p.85.

Santiago to a starting point which illustrates the abandonment of faith, in the dilapidated church which holds the treasure he searched for all along. The treasure Santiago finds completes the quest in typically cyclical fashion, however the quest itself sits within a greater labyrinthine design. Having completed his rite of passage the now enlightened Santiago uses his riches to return to the Edenic oasis having earned the reunion with his erstwhile bride, Fatima. The name of Santiago's bride holds a deep significance in Catholicism where Fatima is a place of pilgrimage in Portugal associated with visions attributed to the Virgin Mary. In completing the labyrinthine circuit Santiago's return to Fatima contrasts Christian constancy with Theseus' abandonment of Ariadne, alongside restoration to an earthly Eden.

A further short example of texts with the potential for eco-labyrinthine reading are the first books of Ursula Le Guin's Earthsea series; *A Wizard of Earthsea* (1968) and *The Tombs of Atuan* (1970). Unlike Coelho, Le Guin wrote from an openly non-religious perspective reflected in her introduction to The Left Hand of Darkness (1969) where, while admitting that artists may be influenced by a spiritual force,[645] she personally identifies as 'an atheist' writer.[646]

As a reading tool an eco-labyrinthine approach allows us to identify a structural link between narrative, ecology, and wisdom in *A Wizard of Earthsea*, which begins with the coming of age and rite of passage of Ged as he studies to fulfil his calling as a wizard. The text speaks of understanding the earth as a pattern,[647] with

[645] Ursula K.Le Guin, *The Left Hand of Darkness* (London:Gollancz, 2017), p.xv.
[646] Le Guin, *Left Hand of Darkness*, p.xvi.
[647] Ursula K. Le Guin, *A Wizard of Earthsea* (London:Puffin Books, 2016), p.8.

consequences of transformational change affecting its 'Equilibrium.'[648] *A Wizard of Earthsea* frames discussion of authenticity and change within labyrinthine conventions of boundaries to action; convoluted and circuitous journeys in which parallels to earlier experiences are recalled, which themselves identify subjection to an ecological ordering. The book also deals with transgression and the advent of a monster, which Ged ultimately discovers is an aspect of himself and related to embracing his own mortality. This internalizing of the Minotaur figure as a threat to life appears more explicitly in the next book of the *Earthsea* series, *The Tombs of Atuan* ,where Ged re-appears trapped in a physical, multicursal, underground labyrinth, from which he requires the aid of the young girl Tena, herself imprisoned as a sacrificial offering to the gods, who escapes with him. Their freedom entails a return to nature, authenticity, and simplicity; contrasted with the maze-like tombs, representative of imprisonment within a false belief system. On their escape through the western mountains, Ged dismisses transformative magic as illusion in favour of an authentic and humbling relationship within the bounds of nature.[649]

These two *Earthsea* novels work within a labyrinthine dynamic to articulate an ecological orientation toward equilibrium in a world devoid of the influence of the Christian myth of origins and fall. As a reading tool the labyrinth possesses the versatility to bring to the fore competing definitions of order in an imperfect world and discuss how humans should accordingly act with regard to ecology. *Atuan* replaces the focus on authenticity based on an Edenic ecological exemplar with an inverse analysis of the emptiness preceding creation; a place of dark confusion.Le Guin's maze embodies an immanent power that mars, cannot create, but which pre-dates

[648] Le Guin, *Earthsea*, p.67.
[649] Ursula K. Le Guin, *The Tombs of Atuan*, in *Earthsea the First Four Books* (London:Penguin Books, 2016), pp.284-285.

the earth; 'before the Light, the powers of the dark, of ruin, of madness.'[650] Order and balance emerges with the advent of the power of light and results in the creation of order and regularity. Authenticity appears as central to maintaining a balanced world with understanding accumulated through the labyrinthine journeys that began in the first book that invested Ged with knowledge of ecological balance and how transformative magic should therefore be used sparingly.

An eco-labyrinthine reading of texts focuses attention on how they deal with the binary tension between authentic and inauthentic environments, through the articulation of structural ecological models embedded in narrative. Le Guin and Coelho each gravitate towards an equilibrium based model of ecology aligned to the labyrinthine journey of heroic figures. However whereas Coelho provides the figurative prize of a return to Eden, as a return to God personified through place, Le Guin's rejection of Christian creation and Fall mythology leads to identifying order by depicting its inverse, in the lack of order embodied in the figure of the barren maze. In explicitly defining a negative structural model *Atuan* at the same time draws attention to the ambivalence of ecology: 'The Earth is beautiful, and bright, and kindly, but that is not all. The Earth is also terrible, and dark, and cruel.'[651] A series of examples follow this statement to illustrate good and evil side-by-side as a natural balance. The maze represents evil and gods who 'have no power of making. All their power is to darken and destroy. They cannot leave this place they *are* this place.'[652] The barren maze visibly articulates environmental decay, loss of hope and death in a specific place. Le Guin's maze ties this vision to misleading religious adherence and the darkness of the 'priestess Kossil…she has prowled these caverns as she prowls

[650] Le Guin, *Atuan*, p.266.
[651] Le Guin, *Atuan*, p.266.
[652] Le Guin, *Atuan*, p.266.

the labyrinth of her own self.'[653] Good, as the binary opposite of evil, must therefore comprise an inverse structure to the disordered and misleading maze. Le Guin does not locate this in a particular place but rather in the regularity of the ecological structure in the world outside the maze, where order appears in the circuits of the planets that balance night and day. Order appears to have gradually arisen, or evolved, and Ged appreciates that any transformative activity should therefore be assessed for its potentially disruptive effects on this delicate balance. Ged learns to use magic sparingly; to create temporary transformations.

The efficacy of Ged's magic rests upon his prior knowledge of the subject of his spell: 'to weave the magic of a thing, you see, one must find its true name out.'[654] In this way authenticity appears temporally fixed to a point of inception rather than dynamic and evolving, as the original name somehow defines the true nature of the object. Le Guin therefore struggles to reconcile the evolutionary principles implicit in *Earthsea* with concern for preserving an essential, fixed authentic order. While Le Guin at least engages with ecological structure in relation to the non-human, a structural reading challenges the ecocritical currency of *The Alchemist* for its narrow focus on Santiago and his personal discovery of a new Eden. Insufficient tension exists between the labyrinthine passage that leads Santiago to redemption through becoming attuned to nature and a threat to ecological order in rejecting the quest. As a result the balance shifts too far towards anthopocentrism as opposed to a wider ecological awakening.

[653] Le Guin, *Atuan*, p.266.
[654] Le Guin, *Atuan*, p.266.

The Coelho and Le Guin examples illustrate the potential for expanding the application of an eco-labyrinthine reading beyond *Rings* and *Materials*. The outline of the methodology in this thesis represents a starting point for further application of the method as an additional tool for ecocritical analysis. The method's encompassing of alternative ecological structural theories creates a dialogue between them which exposes consistency of application, their inter-relatedness, and problems with each structural perspective. The method applies to revealing ecological structure while also facilitating assessment of quest heroism in terms of how it consolidates or challenges an overarching narrative pattern and its ecological symbolism.

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